



Puns and Pop Culture References

This book contains numerous puns and pop culture references, which are notoriously difficult to translate. This appendix explains these puns and references. It was written for inclusion in foreign translations, but English speakers might find it interesting as well.

Front Matter and Introduction

The word “Puzzlers” in the book’s title is a reference to the “Puzzler” segment of Tom and Ray Magliozzi’s *Car Talk* radio show, broadcast weekly on National Public Radio (NPR). On this segment of the show, Tom and Ray present brainteasers. The exhortation to “write your puzzler on the back of a \$20 bill and send it to us” is taken from *Car Talk*. Needless to say, it is not a serious request. The authors’ stage names “Click and Hack, the Type-it Brothers” are a play on Tom and Ray Magliozzi’s stage names “Click and Clack, the Tappet Brothers.” (A tappet is a part of an engine.) The phrase “don’t code like my brother” is paraphrased from the words that Tom and Ray Magliozzi use to end each *Car Talk* broadcast, which are “don’t drive like my brother.”

Chapter 2. Expressive Puzzlers

The chapter title is a pun on the word “expressive,” which means “effectively conveying meaning or feeling.” The puzzles in this chapter concern Java expressions.

Puzzle 1, “Oddity”

This title is pun on the word “odd,” which has two meanings. One meaning is “strange”; the other is the mathematical meaning, “not divisible by two.” The puzzle illustrates strange behavior concerning the mathematical property.

Puzzle 2, “Time for a Change”

This title is another weak pun. The phrase “time for a change” is a cliché meaning that something is unsatisfactory and should be corrected. Candidates seeking to unseat an incumbent often proclaim that it’s time for a change. The term “change” also refers to the money that you get back when you make a purchase and give the cashier more than you owe. In the “word problem” contained in the puzzle, the purchaser of the spark plug is named Tom. This is a reference to Tom Magliozzi of *Car Talk*.

Puzzle 3, “Long Division”

This title is another pun. “Long division” is the manual procedure for dividing numbers that is taught in grade school. Additionally, the puzzle concerns the division of Java long values.

Puzzle 4, “It’s Elementary”

This title is a reference to Sir Arthur Conan Doyle’s Sherlock Holmes, who says “Elementary” to his assistant Watson in *The Crooked Man* (1893). Also the puzzle concerns addition, which is an elementary skill taught in elementary school. Furthermore, the title contains a subtle hint that is revealed in the puzzle’s solution. Finally, the solution refers to 66,666 as “such a beastly number.” This is a biblical allusion to the New Testament (Revelations 13:18), in which 666 is referred to as “the number of the beast.”

Puzzle 5, “The Joy of Hex”

This title is a wordplay on Alex Comfort’s *The Joy of Sex*, an influential sex manual published in 1972. The hexadecimal number featured in the puzzle (0xcafebabe) is the “magic number” that identifies a binary file as a Java class file. It is also a pun in that it forms two words “café” and “babe,” bringing to mind a young woman who frequents coffee houses.

Puzzle 6, “Multicast”

Yet another weak pun: Multicast is an Internet protocol for broadcasting to multiple recipients. In the puzzle, the program applies **multiple cast** operations in sequence.

Puzzle 7, “Swap Meat”

This title is an exceptionally bad pun. A “swap meet” is a gathering for the sale or barter of usually secondhand objects, similar to a flea market. In this title, we’ve replaced the word “meet” with its homonym “meat” because the program in the puzzle purports to swap two numbers but fails to do so: It makes mincemeat of the

swap. (Besides referring to a pie filling, mincemeat can refer a state of destruction or annihilation.)

The two numbers swapped by the program are 1984 and 2001. Both are titles of science fiction books, the former by George Orwell and the latter by Arthur C. Clarke.

Puzzle 8, “Dos Equis”

Dos Equis is the name of a Mexican beer. It is Spanish for “two X’s.” The label on the bottle depicts two X’s. The program in the puzzle looks like it ought to print two X’s.

Puzzle 9, “Tweedledum” and Puzzle 10, “Tweedledee”

Tweedledum and Tweedledee are two characters in Lewis Carroll’s *Through the Looking Glass* (1871). Like puzzles 9 and 10, the characters are nearly identical but in a state of near-total disagreement. The word “contrariwise,” used in puzzle 10, is a slightly archaic term meaning “just the opposite.” It is uttered repeatedly by Tweedledee in *Through the Looking Glass*.

Chapter 3. Puzzlers with Character

The chapter title is a pun on the word “character.” When you say that something “has character,” you mean that it has notable or conspicuous traits. The puzzles in this chapter are about Unicode characters.

Puzzle 11, “The Last Laugh”

This title refers to the proverb “He who laughs last, laughs best.” The proverb means that you may laugh now, thinking you have won, but in the end someone else may prevail, getting “the last laugh.” The program appears to print HaHa, which is an English onomatopoeia signifying laughter, but it prints something else. Clearly the programmer does not get the last laugh.

Puzzle 12, “ABC”

This title is the name of a #1 hit song from 1970 by the Jackson 5. The obvious (but incorrect) answer to the puzzle comes from the chorus of that song.

Puzzle 13, “Animal Farm”

This title refers to George Orwell’s 1946 masterpiece, as explained in the puzzle.

Puzzle 14, “Escape Rout”

This title is a play on words: An “escape route” is another name for an emergency exit. A “rout,” however, is a disastrous defeat or complete failure, and the “escape” in the title refers to a Unicode escape [JLS 3.3]. Thus, the puzzle is a complete failure involving Unicode escapes.

Puzzle 15, “Hello Whirled”

This title is a silly pun. “Whirled” is a homonym for “world,” so the title of the puzzle is pronounced just like “Hello world,” which the program appears to print.

But it does not. Whirled means “turned abruptly around,” which the program certainly is.

A comment in the solution makes fun of Peter von der Ahé. Peter was one of the original implementers of wildcard types in Java 5.0. He now leads the team that maintains `javac` for Sun Microsystems.

Puzzle 16, “Line Printer”

A line printer is a nearly obsolete high-speed output device that prints a line at a time. The program in this puzzle purports to print a line, which makes it a line printer too.

Puzzle 17, “Huh?”

The solution contains two lessons. The second lesson (“If it hurts when you do it, don’t do it.”) is a reference to a very old, and not very funny, joke: A guy goes to the doctor, moves his arm, and says, “Doc, it hurts when I do this.” So the doctor says, “Don’t do that!”

Puzzle 18, “String Cheese”

String cheese is a semisoft mozzarella cheese that has been pulled into strands and then braided or molded into cylinders resembling ropes. Cheesy is an American idiom for shabby or cheap. The program in this puzzle makes strings that are cheesy.

Puzzle 19, “Classy Fire”

Another bad pun. The words “classy fire” and “classifier” sound pretty much alike. But “classy fire” doesn’t mean much of anything. Fires destroy things, and the program in this puzzle is destroyed.

Puzzles 20 - 21, “What’s My Class?”

The titles of these puzzles allude to a hugely popular game show called *What’s My Line?* that ran on American television from 1950 to 1967. The object of the game was for the panelists to guess the occupations (or “lines”) of the contestants.

The solution to Puzzle 20 says “If you ran the program, you found that it actually prints `////////////////////.class`. What’s going on here? Are we a victim of the slasher?” This is another pun. A “slasher film” is a horror film where a psychotic (the “slasher”) stalks and graphically kills teenagers or young adults. In the output of the program, the slash character (/) appears to have destroyed the output.

Puzzle 22, “Dupe of URL”

This title is a play on words on *Duke of Earl*, Gene Chandler’s #1 hit song from 1961. A dupe is one who is easily deceived or cheated, and you know what a URL is. If you are fooled by this puzzle, then perhaps you are the Dupe of URL?

Puzzle 23, “No Pain, No Gain”

This title gained popularity as an athlete’s motto in the early 1980’s. Surprisingly, the aphorism dates at least to 1589, when it appeared in Leonard Wright’s *Display of Dutie*. It also appears in *A Collection of English Proverbs*, published in 1670 by the English scholar, John Ray. The title also contains a not-so-subtle hint concerning the puzzle’s solution.

Chapter 4. Loopy Puzzlers

The chapter title is a pun on the word “loopy,” which can mean “crazy or bizarre,” as well as “having or characterized by loops.”

Puzzle 24, “A Big Delight in Every Byte”

This title is a play on words on a 1980’s ad campaign for the American snack food, Hostess Cupcakes. The slogan for the ad campaign was: “A big delight in every bite.” The words “bite” and “byte” sound alike. The program in this puzzle appears to examine every byte value, and to show its delight by printing “Joy!” when it hits a particular value.

Puzzle 26, “In the Loop”

The expression “in the loop” means “having the special knowledge or power particular to an elite group.” The title is a weak pun on loop constructs.

Puzzle 27, “Shifty i’s”

This title is a pun on the phrase “shifty eyes,” an attribute that is held to indicate a lack of trustworthiness. (“Eyes” and “i’s” are pronounced identically.) The program in the puzzle shifts the contents of the variable `i`.

Puzzles 28 - 33, “Looper”, “Bride of Looper”, and so on

The titles of these puzzles are a play on the names of the many Frankenstein monster movies. If you substitute the name Frankenstein for the word “Looper” in any of these titles, you’ll get the name of an actual Frankenstein movie.

Puzzle 33 contains the lesson “watch out for overflow: Like the Wolfman, it’s a killer.” The Wolfman, also known as werewolf, is a deadly monster, able to change appearance from a human to a wolf.

Puzzle 34, “Down for the Count”

In boxing, a player loses by a knockout when he is knocked down and cannot stand by the count of 10. The losing boxer is said to be “down for the count”.

Puzzle 35, “Minute by Minute”

The title of this puzzle is also the title of a Doobie Brothers album from 1978, and of a hit song contained on that album. As a side-note, James Gosling is said to have “broken through on a pile of technical issues” in the design of the language that became Java at a 1991 Doobie Brothers concert.

Chapter 5. Exceptional Puzzlers

The chapter title is a play on the word “exceptional,” which means “superior.” The puzzles in this chapter have to do with Java exceptions. This pun is used throughout the chapter (Puzzles 37, 43, and 45).

Puzzle 39, “Hello, Goodbye”

Besides describing the intended output of the program, this title is the name of a #1 hit Beatles song from 1967. And hidden in the first paragraph of the solution is the name of a #2 hit Jackson 5 song, *Never Can Say Goodbye*. The latter song was covered by several other artists, including disco queen Gloria Gaynor, who had a #1 hit with it in 1974.

Puzzle 40, “The Reluctant Constructor”

This title is an exceptionally lame pun. The constructor in this puzzle is reluctant in the sense that it doesn’t want to execute. It is also the constructor for a class named `Reluctant`. Finally, the words `reluctant` and `constructor` almost rhyme.

Puzzle 41, “Field and Stream”

This title is the name of an American magazine featuring outdoor topics such as hunting and fishing. It is a pun on the technical terms “field” and “stream.” The puzzle concerns Java class fields representing I/O streams.

Puzzle 42, “Thrown for a Loop”

The idiom “thrown for a loop” means dazzled or bewildered by some event. For example “I was really thrown for a loop when the Red Sox won the World Series.” Again, it’s a pun: The puzzle concerns a loop construct that is terminated when an exception is thrown from the loop.

Puzzle 44, “Cutting Class”

The idiom “cutting class” means to be absent from school without excuse. Yet again, it’s a pun: The puzzle is based on cutting (in other words, removing) a Java class file.

Puzzle 45, “Exhausting Workout”

This title is a pun based on the words “Exhaustive”, which means complete, and “Exhausting” which means tiring. The program exhaustively traverses a large binary tree. In doing so, it repeatedly exhausts the stack space. The program takes so long to run that you would be exhausted if you waited for it to finish. In fact, you’d be long dead and all of the sun’s nuclear fuel would be exhausted.

Chapter 6. Classy Puzzlers

The chapter title is a pun on the word “classy,” which usually means elegant or stylish. In this case, it also means related to Java classes.

Puzzle 46, “The Case of the Confusing Constructor”

The name of this puzzle follows a traditional pattern for naming mystery stories: “The case of the *adjective noun*.” The phrase, “Confusing Constructor,” is a pun: The puzzle concerns constructors whose behavior is confusing, and that are constructors for the class named `Confusing`.

Puzzle 47, “Well, Dog My Cats!”

This title is an archaic exclamation of surprise. In the context of the puzzle, it is—you guessed it—a pun. The program fails to distinguish Dog and Cat instances, essentially “dogging the cats” (and vice-versa).

Puzzle 48, “All I Get Is Static”

This title is another old expression. It was used to indicate that someone couldn’t receive an analog radio or television signal. It is a pun on the Java `static` modifier; the puzzle concerns the behavior of static methods.

The program concerns two dogs named Woofers and Nipper. The names are intended to suggest that Woofers barks and Nipper bites. The name Nipper is a reference to the dog in the Francis Barraud painting *His Master’s Voice*. Rights to the painting were sold to The Gramophone Company of Middlesex England in 1899, and the image became famous as a trademark for a number of record companies including EMI and RCA.

Puzzle 49, “Larger Than Life”

This title is an idiom meaning that someone is substantially more exciting and interesting than most people. The phrase “King of Rock ’n’ Roll” refers to Elvis Presley (1935-1977). Fans and tabloid newspapers claimed that he was still alive for decades after his death. There are, to this day, many professional “Elvis impersonators” who make their living dressing as Elvis and performing his songs.

The belt size calculation in the program is a reference to the fact that Presley gained a lot of weight toward the end of his career. The title of the puzzle is a pun, in that Elvis was larger than life in the idiomatic sense, but the program appears to calculate a belt size that would make him larger than life in the physical sense.

Puzzle 50, “Not Your Type”

This title is a phrase used to describe one person as being incompatible with another in a relationship, as in “She’s not your type.” The puzzle, however, concerns the compatibility of data types. It describes `instanceof` and `cast` as Java’s “classiest operators.” This is essentially the same pun used in the chapter title.

Puzzle 51, “What’s the Point?”

This title is a phrase that is used to indicate that something is lacking in value (or “pointless”). It is a pun on the fact that the puzzle concerns the behavior of a program that models points on the Cartesian plane.

Puzzle 52, “Sum Fun”

This title is a pun on the idiom: “Some Fun!” This idiom is spoken to indicate that something is definitely *not* fun. The puzzle, on the other hand, is a bit of fun concerning sums. (Sum and some sound alike in English.)

Puzzle 53, “Do Your Thing”

This title is a ’60s era expression encouraging people to express themselves. Solving the puzzle requires you to extend a class called `Thing`, in essence creating “your Thing.”

Puzzle 54, “Null and Void”

This title is a legal term meaning unenforceable or no longer of any effect. A contract can be rendered null and void under various circumstances. The puzzle, however, concerns the `null` object reference and the `void` return type.

Puzzle 55, “Creationism”

Creationism is the doctrine that the universe was created by God in six days, as described in the book of Genesis. It is sometimes proposed as an alternative to evolution. This puzzle concerns, at least superficially, the creation of objects.

Chapter 7. Library Puzzlers

Strangely, there is no pun in the title of this chapter. That is because the authors could not think of one.

Puzzle 56, “Big Problem”

Another lame pun. A “big problem” is a great difficulty. Alternatively, it is a puzzle concerning the `BigInteger` type, defined in `java.math`.

Puzzle 57, “What’s in a Name?”

This title is a quote from Shakespeare’s *Romeo and Juliet*: “What’s in a name? That which we call a rose, by any other name would smell as sweet.” The implication, of course is that names should not matter, but sometimes they do.

Puzzle 58, “Making a Hash of It”

The expression “to make a hash of” something means to make a mess of it, which the program in this puzzle certainly does. The title is a pun on “hash code,” a concept central to the puzzle.

Puzzle 59, “What’s the Difference?”

This title is a weak pun. The phrase “What’s the difference?” is an idiom meaning “Why should you care? It doesn’t matter.” Also, “difference” refers to the result of a subtraction, which is the subject of this puzzle.

Puzzle 60, “One-Liners”

One-liners are jokes that consist of a single line. The string literals in Parts A and B come from famous sketches in the 1970’s British comedy show *Monty Python’s Flying Circus*. The strings in Part A come from the *Spam* sketch, in which the chanting and, eventually, singing of the word Spam overrides all the other dialogue. This sketch is the source of the word “spam” for junk e-mail. The strings in Part B come from the *Spanish Inquisition* sketch, in which we learn that “nobody expects the Spanish Inquisition!”

Puzzle 61, “The Dating Game”

The Dating Game was a popular game show that aired from 1965-1973. A bachelorette interviewed three bachelors, hidden from her view. Then she chose one to go out on a date, paid for by the show. Occasionally, it was a bachelor who interviewed three bachelorettes. At the end of the show, the host and winning contestants blew a kiss to the viewers. The puzzle title is a weak pun. “Dating” usually

means going out on romantic dates, but in this puzzle it refers to calendar dates, as represented by Java's `Calendar` and `Date` classes.

The "Y2K problem" referred to in the solution is the Year 2000 Problem, the feared widespread breakdown of everything in the year 2000 due to the inability of software to handle 4-digit year fields. These fears proved groundless. The software problems were addressed in time and the actual effects of the millennium change were negligible.

Puzzle 62, "The Name Game"

The Name Game is a novelty song that was a top hit for Shirley Ellis in 1965. In the song, the singer turns an arbitrary name into a rhyme.

Puzzle 63, "More of the Same"

This title is an idiom used to indicate that something is boring or unoriginal. In this case, it indicates the superficial similarity of this puzzle to the previous one. Conveniently, it also rhymes with the title of the previous puzzle.

Puzzle 64, "The Mod Squad"

The Mod Squad was an American cop show that aired from 1968-1973. The protagonists were three young people in trouble with the law who avoided jail by serving as undercover cops. The show made heavy use of the fashions, hairstyles, and slang of the late '60s. The term "mod" means "hip" or "trendy." It is a shortened form of the word "modern." The show's memorable tag line was: "One black, one white, one blonde." The title of this puzzle is a pun: The puzzle concerns the mathematical *mod* or *modulo* operator, which computes residues in modular arithmetic.

Puzzle 65, “A Strange Saga of a Suspicious Sort”

Like Puzzle 46, the title of this puzzle sounds like that of a mystery story. Also it is highly alliterative: All of its words except for articles and prepositions begin with the letter S. Finally, it’s a pun. The phrase “a suspicious sort” could mean that the saga is of a questionable nature, or that the sort algorithm performed by the program is suspect.

Chapter 8. Classier Puzzlers

As in Chapter 6, this title is a play on the word classy. Chapter 8 contains more puzzles that are “classy,” but the use of the comparative form “classier” suggests that it contains puzzles that are “more classy.”

Puzzle 66, “A Private Matter”

This title is an idiom meaning a personal situation that is not suitable for public discussion. It is a weak pun on Java’s `private` access modifier, which appears in the program.

Puzzle 67, “All Strung Out”

This title is an idiom meaning intoxicated or stupefied from drug use. It is a weak pun on `String`, because `strung` is the past tense of the verb “to string.”

Puzzle 68, “Shades of Gray”

This title is a metaphor applied to complex situations that cannot be classified into two groups (“black and white”), but must be analyzed along a continuum.

Puzzle 69, “Fade to Black”

This title is a cinematic term describing a special effect where the screen darkens until all is black. The title suggests resolution of the previous puzzle in two ways: the cinematic effect is often used to end a scene, and black is not a shade of gray.

Puzzle 70, “Package Deal”

The phrase “package deal” means an offer involving a number of related items, typically at a discount. This title is weak pun on the Java package abstraction.

The words and phrases that populate the program in this puzzle are taken from the authors’ stage names (Click and Hack, the Type-it Brothers), and the stage name of their Puzzlers presentations (*Code Talk*).

Puzzle 71, “Import Duty”

The phrase “import duty” means a tax on imported goods. It is a weak pun on the Java `import` statement.

Puzzle 72, “Final Jeopardy”

This title is the name of the third and final round of the game show named *Jeopardy!*. It is perhaps the most popular and enduring of all American game shows. It first aired in 1964, and has been on the air for most of the intervening years. (It was off the air from 1976-1977 and 1980-1983.)

The puzzle’s title is a pun on Java’s `final` modifier. The program is peppered with other elements of the game show. The second round of the show is called “Double Jeopardy,” which is also a legal term. The show features monetary prizes, though neither \$64,000 nor 2 cents are prize values used in *Jeopardy!*.

Puzzle 73, “Your Privates Are Showing”

This title is a slightly rude pun on Java’s `private` modifier. “Privates” is another word for the private parts of the human anatomy.

Puzzle 74, “Identity Crisis”

Identity crisis is a psychological term referring to confusion over social role coupled with a sense of discontinuity in personality. These days, it is often applied to organizations that have lost their direction. The puzzle title is a pun on Java’s notion of object reference identity.

Chapter 9. More Library Puzzlers

(See the explanation for the title of Chapter 7.)

Puzzle 77, “The Lock Mess Monster”

This title is a pun on the mythical (?) sea creature from Scotland, “The Loch Ness Monster.” The program in this puzzle is a mess involving locks, certainly a monster in its own way.

Puzzle 79, “It’s a Dog’s Life”

The expression “a dog’s life” is slang for a miserably unhappy existence. The expression dates from the sixteenth century when most dogs really did lead such an existence.

Fido is supposedly a traditional American dog name, though neither of the authors has ever met a dog named Fido. Presumably the name “Fido” comes from the word “fidelity.”

Puzzle 80, “Further Reflection”

The phrase “on further reflection” means “upon reconsideration.” This title is a pun on Java’s reflection facility. It is “further” reflection because a previous puzzle (Puzzle 78) also concerns reflection.

Puzzle 81, “Charred Beyond Recognition”

This phrase means “burned beyond recognition.” It is a pun on the Java language char type.

Puzzle 82, “Beer Blast”

“Beer Blast” is slang for a party at which large quantities of beer are consumed. The title is a pun because the puzzle concerns a program that “blasts” out a large amount of text concerning beer. The text comprises the lyrics to an American childhood song that is traditionally sung on school busses, presumably to annoy the driver:

Ninety-nine bottles of beer on the wall
Ninety-nine bottles of beer
You take one down, pass it around
Ninety-eight bottles of beer on the wall
(And so forth, ad nauseam.)

The use of the word “bitten” in the sentence “Many programmers have been bitten by this bug over the years” is idiomatic. In this context, the word “bitten” means negatively affected, perhaps with an element of surprise.

Puzzle 83, “Dyslexic Monotheism”

This title is a convoluted joke. A dyslexic has trouble reading, and confuses words with their anagrams. For instance, “God” might be confused with “Dog.” A monotheist believes there is one God. Ergo, a dyslexic monotheist might believe there is only one dog, as does the subject of this puzzle.

The puzzle contains a second pun. The phrase “exceptional dog” brings to mind a dog that is better than average, but in this case it refers to a dog that is a Java exception.

Puzzle 84, “Rudely Interrupted”

This title is a weak pun on Java’s `Thread.interrupt` facility.

Puzzle 85, “Lazy Initialization”

This title is a pun because lazy initialization is a legitimate programming technique, unrelated to the behavior of the program in this puzzle. (Puzzle 52 really does concern lazy initialization.)

The phrase “to shoot yourself in the foot” is an idiom meaning to harm yourself unintentionally.

Chapter 10. Advanced Puzzlers

Again, there is no pun in the title of this chapter. Perhaps this is for the better?

Puzzle 86, “Poison-Paren Litter”

This title is quite possibly the worst pun in the book. It sounds a bit like “poison pen letter,” which is an idiom for an anonymous letter containing abusive or malicious statements.

Puzzle 87, “Strained Relations”

This title is a phrase that describes a relationship that has deteriorated to the point where parties can no longer cooperate effectively. The title is a pun on the mathematical notion of a relation. The puzzle concerns equivalence relations.

Puzzle 88, “Raw Deal”

This idiom means an instance of unfair treatment. It is a pun on Java’s raw types. The program in this puzzle gets a raw deal because it uses raw types.

Puzzle 89, “Generic Drugs”

Generic drugs are copies of brand-name medicines that are identical to the originals in formula, but less costly. This title is a pun on Java’s generic types.

Puzzle 90, “It’s Absurd, It’s a Pain, It’s Superclass!”

This title is a play on words on the tag line of Superman, the first and most famous comic book superhero: “Look! Up in the Sky, It’s a bird, It’s a Plane, No... It’s Superman!” The first Superman comic book came out in June 1938, and Superman comics have been published continuously to this day. There have been countless Superman movies, TV shows, toys, and yes, even boxer shorts. The title of this puzzle is a triple pun: “absurd” rhymes with “a bird,” “a pain” rhymes with “a plane,” and “superclass” sounds like “superman.”

Puzzle 91, “Serial Killer”

A serial killer is a murderer who kills multiple victims in similar fashion over a period of time. This title is a pun on Java serialization. The program in this puzzle “kills” an object by serializing and deserializing it.

Puzzle 92, “Twisted Pair”

A twisted pair is an electric cable with two insulated wires twisted together to minimize induction. The word “twisted” can mean insane or convoluted. The program in this puzzle is both insane and convoluted, and involves a pair of classes.

Puzzle 93, “Class Warfare”

Class warfare is a term used to describe social and political conflict between social classes. This title is a pun. The program in this puzzle involves two versions of a Java class that are seemingly at war with each other to determine whose constant definitions will apply.

The constant definitions in the first version of the class describe a mathematical entity: the null set. The program’s output (the `chemistry set`) refers to a classic science toy consisting of chemicals, test tubes, alcohol burners, and the like. Chemistry sets were popular in the 1960’s. In these days of safety consciousness and litigation, they have largely fallen out of favor.

Puzzle 94, “Lost in the Shuffle”

Lost in the shuffle is an idiom meaning “failing to stand out among the rest.” This title is a double pun: Lost can mean failed, and shuffle can mean “to randomly reorder.” The program in the puzzle shuffles the contents of an array, but fails to do so properly.

Puzzle 95, “Just Desserts”

“Just desserts” is an idiom meaning that which you justly deserve, typically some form of punishment. This title is a pun on the word desserts, which can also mean the sweets served to conclude a meal. The programs in this puzzle, which con-

cludes the body of the book, are mere candy, perhaps sweet but lacking in real nutritional value. These programs are named after classic American desserts: apple pie, banana bread, and chocolate cake.

The solution also contains a pun. The App1ePie program is said to suffer from “cancer of the semicolon,” because it contains a superfluous semicolon. This is a weak pun on the disease “cancer of the colon.” The pun was stolen from Turing Award recipient Alan Perlis who said “Syntactic sugar causes cancer of the semicolon.”

The expression “Heads I win, tails you lose” describes a coin toss that is rigged so that one person always wins.

Appendix A. Catalog of Traps and Pitfalls

“Go to Chapter 1! Go directly to Chapter 1. Do not pass GO. Do not collect \$200” is a reference to the classic American board game of *Monopoly*, introduced by Parker Brothers in 1933. The game contains two decks of cards, known as *Chance* and *Community Chest*. If a player lands on a space corresponding to either deck, he draws a card from that deck and follows the instructions on the card. Each deck contains a card reading “Go to Jail! Go directly to Jail. Do not pass GO. Do not collect \$200.”

