Exercise2.1

1. A program that can be taken to any computer and use normally.
2. Java is secure, robust and portable.
3. A thread is a process that can run concurrently with other processes. 2 thread, one thread transfers an image from one machine to another across a network, while the other thread simultaneously interacts with the user

Exercise 2.2

1. Java virtual Machine
2. The machine language for an imaginary Java computer, to run byte code JVM needs to be installed.
3. Java programs that are pre translated into byte code, mostly web based.

Exercise 2.5

1. Edit, compile, execute.
2. Inevitable that we will make typographical errors when errors when we edit programs, and the compiler will nearly always detect them.
3. A. system.out.println(“Here is an error”);

b. System.out.println(“Here is another error”);

1. It is Important because program offend out live the programmer and need to manage by other people.

Exercise 2.6

1. The system class that refers to the keyboard.
2. Assigns a number to a variable.
3. Reads the input entered by the keyboard, and tells the compiler where to find complete specifications for the class.
4. I don’t even knowwwwww
5. Print: print a string or variable on the same print on the same line

Println: prints everything on a new line

Exercise 3.2

Exercise 3.3

1. a. system.out.print (“ enter your hourly wage”);

wage = reader.nextDouble();

b. system.out.print(“Enter your Social Security number”);

ssn = reader.nextLine();

1. To tell the computer how to storage the variable being passed in.
2. It skips it. So add an extra agreement to catch the enter.

Exercise 3.5

1. The errors are detected at compile time.
2. x/y when y = 0. It can’t catch it because Y can change.

Exercise 3.6

1. Trouble shoot the code.
2. Change: area = base + height /2 ;

To : area = (base\*height)/2;

Exercise 4.1

1. A. x\*=2;

B. y % = 2;

1. A. x+=5;

B. x = x\*x

Exercises 4.2

1. A. 2

b. 4.0

c. 64

d. 1.9

1. A. System.out.print(gen.nextInt(21));

b. System.out.print(gen.nextInt(10));

Exercise 4.4

1. Type of expression returns the value true or false
2. To hold what the if statement does if it is true.
3. If : only checks if one case is true

If-else has other statement for if the one before it isn’t true.

1. A. true

b. true

c. false

1. A. x > 0

b. numSec = mins

c. I don’t even know

1. A. 5

b. Not equal

1. A. If (x > y)

System.out.println(x);

Else

System.out.println(y);

b. system.out.println(“ enter a number” );

int x = reader.nextInt();

system.out.println(“ enter a other number” );

int y = reader.nextInt();

if (x > y)

system.out.println(y +” “ + x);

else

system.out.println(x +” “ + y);

Exercise 4.5

1. When the condition is false from the outset.
2. The three components are Initialize, test, and loop body
3. The statement or statements inside the loop never execute.
4. A. it list the exponents and raised basic 2 to the power of the exponents

B.it prints all the numbers entered until -999 is entered

1. A. int expo =1

While (expo <= 10)

{

System.***out***.println(expo + “ “ + Math.pow(expo, 2);

System.***out***.println(expo + “ “ + Math.pow(expo, 3);

Expo++;

}

b.

System.***out***.println(“do you want to play? “);

String anw = reader.next();

While (anw ! =no)

{

System.***out***.println((int) (Math.random()\*10));

System.***out***.println(“do you want to play? “);

String anw = reader.next();

}

c. System.out.println(“How old are you? “);

int anw = reader.nextInt();

While (anw ! = 100)

{

System.out.println(anw);

System.out.println(“How old are you? “);

int anw = reader.nextInt();

}

Exercise 4.6

1. A. print the exponent and rises 2 to the power that exponent

b. takes the expo makes it equal to count then subtracts 1 and times base(2) times base

2. a.

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Exercises 4.8

1. Uses a scanner class for a text file input that we use for keyboard input.

A. Scanner reader = **new** Scanner(**new** File("numbers.txt"));

**double** number, sum = 0;

**int** count = 0;

**while** (reader.hasNext()){

number = reader.nextDouble();

sum += number;

count++;

}

**if** (count == 0)

System.***out***.println("The file had no numbers");

**else**

System.***out***.println("The average of " + count + " numbers is " +

sum / count);

B. . Scanner reader = **new** Scanner(**new** File("numbers.txt"));

**int** number, nums = 0;

**int** count = 0;

**while** (reader.hasNext()){

number = reader.nextInt();

nums = reader.nextInt();

}

**if** (count == 0)

System.***out***.println("The file had no numbers");

**else**

System.***out***.println( number+ “ “ nums);

Exercise 4.9

1. A.its missing an a { and }
2. B. its missing a {