**Review for Java Key Mon. Jan. 29, 2018**

NOTE: a) Save its file name as *CS212Review\_first\_lastname*. b) Highlight your answers. c) Email the document as an attachment to usvwccs@gmail.com and the email subject is the same as the file name.

For the following questions, assume that *input* is the pre-defined *Scanner* object.

1. Correct grammar errors for the following segment of code.

 int score = input.next();

 while (score > 60);

 { System.out.print(“Pass.“);

 score = input.next();

 }

 int score = input.nextInt();

 while (score >= 60)

 { System.out.print(“Pass.“);

 score = input.nextInt();

 }

2. What is the output after the following segment of code is executed?

 int a = 1;

 int b = 2;

 a = (3 \* a + b) / 2;

 b = (3 \* a + b) / 2;

 System.out.println (“a = ” + a);

 System.out.println (“b = ” + b);

a = 2

b = 4

3. Write the following while-loop into a for-loop. What is the value of *count* after the execution of the code segment? **\_100\_\_**

int count = 0;

int sum = 0;

while(count < 100)

{ sum += count;

 count ++;

}

int sum = 0;

for(count=0; count<100; count++)

{

 sum += count;

}

4. Given a file with the following data:

2 7 6 1 3 -2 9

(a) What is the output after the following segment of code is executed for the above input file?

 int num1 = 0;

 int num2 = input.nextInt();

 while(num2>0)

 {

 num1 ++; // as a counter

 System.out.print(num2 + “ “);

 num2 = input.nextInt();

 }

 System.out.println();

2 7 6 1 3

 (b) What is the values of *num1* and *num2* after the execution of above statement?

 num1: \_5\_\_

 num2: \_-2\_\_

5. Write a segment of code to calculate the following expression and output the result to the monitor: S = 1 + 2 + 3 + … + 100.

int sum = 0;

for(int count=0; count<=100; count++)

{

 sum += count;

}

System.out.println(sum);

6. Write a segment of code to read a file containing the three scores of a student and his/her full name from a file as following. The code will output the student’s full name and average score.

**77 99 86**

**Joe Ray Smith**

int s1 = input.nextInt();

int s2 = input.nextInt();

int s3 = input.nextInt();

String dummy = input.nextLine(); // consume “\n”

String name = input.nextLine();

System.out.println(name);

double avg = (s1 + s2 + s3)/3.0;

System.out.println(avg);