Sample Questions

1. Write the values that will be printed to the console by the statements below. If the expression is incorrect, write “error”:

   double a = 9.0, b = 2.0;
   int i = 9, j = 2;
   char c = 'a';

   a. System.out.println(i % j);

   Answer: 1

   b. System.out.println(i / j + a / b);

   Answer: 8.5

   c. System.out.println(5 < i < 20);

   Answer: error

   d. System.out.println( (char) (c + 5) );

   Answer: f

   e. System.out.println( ((i == 9) || c == 'b') && (j >= 2) );

   Answer: true
2. Read the following programs, write the values that will be printed to the console:

Question a.

```java
public class test1 {
    public static void main(String[] args) {
        int a = 1;
        int b = 2;
        int c = 3;

        if (a > 1) {
            if (b == 2 || c == 3) {
                System.out.println(a + b + c);
            } else {
                System.out.println(a - b - c);
            }
        } else {
            if (b > 1 && c > 2) {
                System.out.println(a - b + c);
            } else {
                System.out.println(a + b - c);
            }
        }
    }
}
```

Answer: 2
Question b.

```java
public class test2 {
    public static void main(String[] args) {
        int i = 1;
        int sum = 0;

        while (i < 10) {
            i++;

            if (i % 2 == 0) {
                sum = sum + i;
            } else {
                continue;
            }
        }

        System.out.println(sum);
    }
}
```

Answer: 30
3. The following program reads three strings, and then prints out the longest one. Complete the following program:

```java
import java.util.Scanner;

public class test2
{
    public static void main(String[] args)
    {
        Scanner in = new Scanner(System.in);

        int i;
        String s1, s2, s3;

        s1 = in.next();
        s2 = in.next();
        s3 = in.next();

        String longest;

        if ( s1.length() >= s2.length() )
        {
            longest = s1;
        }
        else
        {
            longest = s2;
        }

        if ( s3.length() > longest.length() )
        {
            longest = s3;
        }

        System.out.println( "the longest string is " + longest );
    }
}
```