

Sample

1. What is the output of the following:

```
int a = 6, b = a/4, c = a % 4;
float d = a/4.0;
System.out.println(    "a = " + a +
                      "b = " + b +
                      "c = " + c +
                      "d = " + d);

a = b;
b = c;
d = b**c;
System.out.println(    "a = " + a +
                      "b = " + b +
                      "c = " + c +
                      "d = " + d);
```

2. What is the output of the following:

```
for ( int i = 0 ; i <= 10 ; i = i + 2 ) {
    System.out.print(i + ":" + i+3 + "-");
} // end of for
System.out.println();
System.out.println("The End");
```

3. Write Java code to do the following (not the entire program):

- a. Add the odd numbers from 1 to 2001 inclusive and display the result.
- b. Print the multiples of 9 from 900 to 9000 inclusive.

4. What is the output of the following:

```
for (i = 5; i >= 0; i--) {
    switch (i) {
        case 1:
            System.out.println(i + ":" + i*2);
        case 2:
            System.out.println(i + ":" + i*3);
            break;
        case 3:
            System.out.println(i + ":" + i*4);
        case 4:
            System.out.println(i + ":" + i*5);
            break;
        case 5:
            System.out.println(i + ":" + i*6);
            break;
        default:
            System.out.println(i + ":" + i*7);
    }
}
```

Sample

5. Write a complete Java program that prompts the user for a number of items ordered in a restaurant. Your program should then use a loop that asks for the price of each item ordered and print out a running total of the cost of the meal (that is, after asking for each price, print out the amount spent so far).
6. The aim of the following program is to convert distances between miles and kilometers. Find all the errors in the program. (Hint: There are 10 errors).

```
import java.util.Scanner;

public class ConvertDistance {
    public static void main(String[] args) {
        double k;

        keyboard = new Scanner(System.in);

        System.out.println("To convert from miles to kilometers:")
        System.out.println("Enter a distance followed by 'M' or 'm'");
        System.out.println("        or");
        System.out.println("To convert from kilometers to miles:");
        System.out.println("Enter a distance followed by 'K' or 'k'");

        String userInput = new String(keyboard.nextLine());
        userInput = userInput.toLowerCase();
        userInput = userInput.replaceAll(" ", "");

        if (userInput.indexOf("m") != -1)
            userInput = userInput.replaceAll("m", "");
            m = Double.parseDouble(usInput);
            System.out.println(m);
            k = (m * 1.6);
            System.out.println(m + " miles is equal to " + k + " kilometers");
        } else if (userInput.indexOf("k") != -1) {
            userInput = userInput.replaceAll("k", "");
            k = Double.prseDouble(userInput);
            m = (k/1.6);
            System.out.println(k " kilometers is equal to " + m + " miles");
        } else {
            System.out.println("Invalid input");
            System.exit(-1);
        } // end of if

        System.exit(0);
    }
}
```