Tutorial 2

1. Display the sentence Faculty of Computer Science and Information Technology.
   a. In one line using multiple Java statement
   b. In multiple lines using one Java statement

   Answer:
   a. System.out.print("Faculty of Computer Science "); System.out.println("and Information Technology.");
   b. System.out.println("Faculty of Computer\nScience and Information\nTechnology.");

2. Write a Java statement that print "SDN" - Software-defined networking.
   Answer:
   System.out.println("\"SDN\" - Software-defined networking");

3. Correct the error for the following statements.
   a. System.Println("Java Programming");
   b. System.in.println("Introduction to Java!")
   c. System.out.println("\t is the horizontal tab character");
   d. system.out.println("Java is case sensitive!");

   Answer:
a. System.out.println("Java Programming");
b. System.out.println("Introduction to Java!");
c. System.out.println("\\t is the horizontal tab character");
d. System.out.println("Java is case sensitive!");

4. Write statements for each of the following
   a. Declare a variable that used to store the value of a matric number.
   b. Declare a variable that used to store the value of π.
   c. Initialize a variable named M with the value set to false.
   d. Initialize a variable named P with the value set to 8800000000.
   e. Initialize a variable named letter with the value set to U.
   f. Declare a constant variable named PRO. The value of the constant variable is Java.

   Answer:
   a. String matricNumber;
   b. double pi;
   c. boolean M = false;

d. long P = 8800000000L;
e. char letter = 'U';
f. final String PRO = "Java";

5. Correct the error in the following statements.

a. final double AMOUNT = "32.5";
AMOUNT += 10;
System.out.println("The amount is " + AMOUNT);

b. string chapter = 'Summary';
System.out.println(chapter);

c. int num;
++num++;
num1 = num;

d. int num = 3000;
System.out.printf("%4.2f\n", num);

e. String contact;
Scanner keyboard = new Scanner(System.out);
contact = keyboard.nextLine();

Answer:

a. double amount = 32.5;
amount += 10;
System.out.println("The amount is " + amount);

b. String chapter = "Summary";
System.out.println(chapter);

c. int num = 0;
int num1;
num++;
num1 = num;

d. int num = 3000;
System.out.printf("%4.2f\n", (double)num);

e. import java.util.Scanner; // Must import the Scanner class

f.
```
public class Main {
    public static void main(String[] args) {
        String contact;
        Scanner keyboard = new Scanner(System.in);
        contact = keyboard.nextLine();
    }
}
```

6. Write a java program that print the circumference of a circle. The input of the program is diameter. Display the result in three decimal places. (Note = Math.PI)

```
Enter diameter: 11.8
The circumference of the circle is : 37.071
```

Answer:

```
import java.util.Scanner;

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

            double pi = Math.PI;

            System.out.print("Enter diameter: ");
            double diameter = keyboard.nextDouble();

            double circumference = pi * diameter;

            System.out.printf("The circumference of the circle is: %.3f\n",
    circumference);

            keyboard.close();
        }
    }
```

7. Write a java program that converts inches to meters. (Given 1 inch equals to 2.54 centimeters). Print the output in two decimal places.

```
Enter value in inch: 20.17
20.17 inches = 0.51 meters
```

Answer:

```
import java.util.Scanner;

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

        final double CM_PER_INCH = 2.54;
        final double CM_PER_METER = 100.0;

        System.out.print("Enter value in inch: ");
        double inches = keyboard.nextDouble();

        double centimeters = inches * CM_PER_INCH;
        double meters = centimeters / CM_PER_METER;

        System.out.printf("%.2f inches = %.2f meters\n", inches, meters);

        keyboard.close();
    }
}
```