OOP Using Java- Practical 01

1. Write you first java programme to display "Hello World!" on the screen.

```java
public class Main {
    public static void main(String[] args)
    {
        System.out.println("Hello World!");
    }
}
```

2. Write a programme to display your name on the first line and to display your degree programme on the second line on the screen. Please use command line (cmd) to execute your code.

```java
import java.util.Scanner;

public class Main {
    public static void main(String[] args)
    {
        Scanner input=new Scanner(System.in);
        String name,degree;
        System.out.println("Enter your name: ");
        name=input.nextLine();
        System.out.println("Enter your degree name: ");
        degree=input.nextLine();
        System.out.println("Your name is "+name+" & your degree is "+degree);
    }
}
```

3. Write down a programme to get the following output using a for loop. Repeat the same example by using a while loop.

Executing Loop 0
Executing Loop 1
Executing Loop 2
Executing Loop 3
Executing Loop 4

```java
public class Main {
    public static void main(String[] args)
    {
        //Using for loop
        int i;
        for(i=0;i<5;i++)
        {
            System.out.println("Executing Loop "+i);
        }
    }
}
```

```java
public class Main {
    public static void main(String[] args)
    {
        //Using while loop
        int i=0;
        while(i<5)
        {
            System.out.println("Executing Loop "+i);
            i++;
        }
    }
}
```

4. Write a class and insert the following code block into the appropriate place. Execute the code and get the result.

"

```
int [] numbers = {10, 20, 30, 40, 50};
for(int x : numbers ){
  if( x == 30 ){
    break;
  }
  System.out.print( x );
  System.out.print("\n");
}
  System.out.print("I'm  out of the Loop now");                "
```

Results:

10
20
I'm out of the Loop now

Repeat the same code using "continue" instead of "break". Write down the output.

```
public class Main {
    public static void main(String[] args)
    {
        int [] numbers = {10, 20, 30, 40, 50};
        for(int x : numbers ){
            if( x == 30 ){
                continue;
            }
            System.out.print( x );
            System.out.print("\n");
        }
        System.out.print("I'm   out of the Loop now");

    }
}
```

Results:

10
20
40
50
I'm out of the Loop now

5. Write a class and insert the following code block into the appropriate place. Execute the code and get the result.
1. char grade ='A';
2.   switch(grade)
3. {
4. case 'A' :
5. System.out.println("Excellent!");
6. break;
7. case 'D' :
8. System.out.println("You passed");
9. case 'F' :
10. System.out.println("Better try again");
11. break;
12. default :
13. System.out.println("Invalid grade");
14. }
15. System.out.println("Your grade is " + grade);

Results:

Repeat the same removing "break" command at line number 6. Write down the output.

Excellent!
You passed
Better try again
Invalid grade
Your grade is A

Repeat the same scenario by using if-else-if statement instead of switch case.

```java
public class Main {
    public static void main(String[] args) {
        char grade = 'A';
        {
            if (grade == 'A')
                System.out.println("Excellent!");

            else if (grade == 'D')
                    System.out.println("You passed");

                else if (grade == 'F')
                    System.out.println("Better try again");

                else
                    System.out.println("Invalid grade");
        }
        System.out.println("Your grade is " + grade);

        }
    }
```

6. As of java 5 the enhanced for loop was introduced. This is mainly used for Arrays. Below code contains few mistakes. First execute the code. Then identify the errors printed on the console. Rectify all the errors and execute to get the output:

class TestEnhanceForLoop {

public static void mains(String args[]){

 int [] numbers = {10, 20, 30, 40, 50};

   for(int x : numbers){

              System.out.print(x);

              System.out.print(",")

   }

 System.out.print("\n");

String [] names ={"James", "Larry", "Tom", "Lacy"}

   for(String name : names) {

              System.out.print(name);

              System.out.print(",");

   Output:

```
public class Main {
    public static void main(String[] args) {

        int[] numbers = {10, 20, 30, 40, 50};
        for (int x : numbers) {
            System.out.print(x);
            System.out.print(",");
        }
        System.out.print("\n");
        String[] names = {"James", "Larry", "Tom", "Lacy"};
        for (String name : names) {
            System.out.print(name);
            System.out.print(",");


        }
    }
}
```
10,20,30,40,50,

James,Larry,Tom,Lacy,