School of Computer Science Engineering and Technology

Course- BTech
Course Code- **CSET109**
Year- First

Type- Core
Course Name- **Object Oriented Programming Using Java**
Semester- Even Batch- BTech 2nd Semester

Tutorial-7

Tutorial No.	Name	CO1	CO2	CO3
7	OOPs concepts	✓	✓	--

Objective: The main objective of this tutorial is to learn about the object-oriented concepts of Java language.

7.1 Analyse the given program segment and predict the output:

```
public class Test
{
	public int getData() //getdata() 1
	{
		return 0;
	}
	public long getData() //getdata 2
	{
		return 1;
	}
	public static void main(String[] args)
	{
		Test obj = new Test();
		System.out.println(obj.getData());
	}
}
```

7.2 What will be the output of the following program?

```
public class Test
{
	public int getData(String temp) throws IOException
	{
		return 0;
	}
	public int getData(String temp) throws Exception
	{
		return 1;
	}
	public static void main(String[] args)
	{
		Test obj = new Test();
		System.out.println(obj.getData("GFG"));
	}
```

```
}
```

7.3 Predict the output of the following program:

```
public class Test
{
	private String function(String temp, int data)
	{
		return ("Hi Everyone!!!!");
	}
	private String function(int data, String temp)
	{
		return ("Hello World!!!!");
	}
	public static void main(String[] args)
	{
		Test obj = new Test();
		System.out.println(obj.function(4, "GFG"));
	}
}
```

7.4 What will be the output of the following program?

```
public class Test
{
	// Overloaded methods
	public void fun(Integer i)
	{
		System.out.println("fun(Integer ) ");
	}
	public void fun(String name)
	{
		System.out.println("fun(String ) ");
	}
	// Driver code
	public static void main(String [] args)
	{
		Test mv = new Test();

		// This line causes error
		mv.fun(null);
	}
}
```

7.5 What will be the output of the program?

```
public class Sum {
	public int sum(int x, int y) { return (x + y); }
	public int sum(int x, int y, int z)
	{
```

```
		return (x + y + z);
	}
	public double sum(double x, double y)
	{
		return (x + y);
	}
	public static void main(String args[])
	{
		Sum s = new Sum();
		System.out.println(s.sum(10, 20));
		System.out.println(s.sum(10, 20, 30));
		System.out.println(s.sum(10.5, 20.5));
	}
}
```

7.6 What will be the output of this program?

```
import java.io.*;
class Student {
	public void StudentId(String name, int roll_no)
	{
			System.out.println("Name :" + name + " " + "Roll-No :" + roll_no);
	}
	public void StudentId(int roll_no, String name)
	{
		System.out.println("Roll-No :" + roll_no + " " + "Name :" + name);
	}
}
class Main {

	public static void main(String[] args)
	{
		Student obj = new Student();
		obj.StudentId("Spyd3r", 1);
		obj.StudentId(2, "Kamlesh");
	}
}
```

7.7 What will be the output of the below program?

```
class Demo {
	public void show(int x)
	{
		System.out.println("In int" + x);
	}
	public void show(String s)
	{
		System.out.println("In String" + s);
	}
	public void show(byte b)
	{
```

```
                System.out.println("In byte" + b);
        }
}
class UseDemo {
        public static void main(String[] args)
        {
                byte a = 25;
                Demo obj = new Demo();
                obj.show(a);
                obj.show("hello");
                obj.show(250);
                obj.show('A');
                obj.show("A");
                obj.show(7.5);
        }
}
```

7.8 What will be the output of this program?

```
class Q2{
        public static void main(String args[]){
                int []A=new int[8];
                int i=0;
                for(i=-1;i<A.length-1;){
                        A[++i]=i;
                }
                String res=""+A[2]+(4%2)+(5%2)+i;
                System.out.print(res);
        }
}
```

7.9 What will be the output of the following program?

```
class Q{
        public static void main(String args[]){
                int i=3;
                int e=6;
                int x=7;

                String s="";

                if((i+e)>=(i+x)){
                        i++;
                        s="gg";
                        e--;
                }
                else if((i+e+x)>=15){
                        x++;
                        s="wp";
                }
```

```
                System.out.print(x+s);
        }
}
```

7.10 What will be the output of the following program?

```
class Base
{
        Base()
        {
                System.out.println("Base");
        }
        Base(int n)
        {
                System.out.println("Base:"+n);
        }
}

class Derive extends Base
{
        Derive()
        {
                super(10);
                System.out.println("Derive");
        }
        Derive(int n,int m)
        {
                super(n);
                System.out.println("Derive:"+n+","+m);
        }
}

class Q6{
        public static void main(String args[]){
                Derive D1=new Derive();
                Derive D2=new Derive(40,50);
        }
}
```