1.**RECTANGLE CLASS DEMO**

```
package oop;

public class Rectangle {
	private float length,width;

	public Rectangle() {
		length=1.0f;
		width=1.0f;
	}
	public Rectangle(float length,float width) {
		this.length=length;
		this.width=width;
	}

	public float getLength()
	{
		return length;
	}

	public void setLength(float length) {
		this.length=length;
	}


	public float getWidth()
	{
		return width;
	}
	public void setWidth(float width) {
		this.width=width;
	}

	public double getArea()
	{
		return length*width;
	}

	public double getPerimeter()
	{
		return 2*(length+width);
	}

	public String toString() {
		return "Rectangle[Length="+length+", Width="+width+"]";    }
}
package oop;
```

```
public class TestMain {

	public static void main(String[] args) {

		Rectangle r1=new Rectangle();
		System.out.println(r1);

		Rectangle r2=new Rectangle(1.2f,3.4f);
		System.out.println(r2);

		   r1.setLength(5.6f);
		   r1.setWidth(7.8f);
		   System.out.println(r1);
		   System.out.println("length is: " + r1.getLength());
		   System.out.println("width is: " + r1.getWidth());


	    System.out.printf("area is: %.2f%n", r1.getArea());
	    System.out.printf("perimeter is: %.2f%n", r1.getPerimeter());

	}

}
```

2.EMPLOYEE CLASS DEMO

```
package oop;

public class Employee {
	private int id,salary;
	private String firstName,lastName;

	public Employee(int id,String firstName,String lastName,int salary)
	{
		this.id=id;
		this.firstName=firstName;
		this.lastName=lastName;
		this.salary=salary;
	}
	public int getID()
	{
		return id;
	}

	public int getSalary()
	{
		return salary;
	}

	public String getFirstName()
	{
		return firstName;
	}

	public String getLastName()
	{
		return lastName;
	}

	public String getName()
	{
		return firstName+" "+lastName;
	}
	public void setSalary(int salary)
	{
		this.salary=salary;
	}

	public int getAnnualSalary()
	{
		return 12*salary;
	}
```

```
	public int raiseSalary(int percent)
	{
		return percent*salary;
	}

	public String toString()
	{
		return "Employee[id="+id+",name=" +firstName+ " "+lastName +
",salary="+salary+"]";
		}
}
```

```
package oop;

public class TestMainEmp {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
			Employee e1 = new Employee(8, "Shivaraj", "Shetty", 2500);
			System.out.println(e1);
			e1.setSalary(999);
			System.out.println(e1);  // toString();
			System.out.println("id is: " + e1.getID());
			System.out.println("firstname is: " + e1.getFirstName());
			System.out.println("lastname is: " + e1.getLastName());
			System.out.println("salary is: " + e1.getSalary());
			System.out.println("name is: " + e1.getName());
			System.out.println("annual salary is: " + e1.getAnnualSalary());
			System.out.println(e1.raiseSalary(10));
			System.out.println(e1);
		  }
		}
```