

Practical 14

Aim : Write a program that creates an Array List and adds a Loan object , a Date object , a string, and a Circle object to the list, and use a loop to display all elements in the list by invoking the object's to String() method.

Code :

Loan.java

```
public class Loan
{
    private double Rate;
    private int NoYrs;
    private double Amount;
    public Loan() {
        this (2.5, 1, 1000);
    }

    public Loan(double r, int n,double p) {
        this.Rate = 1;
        this.NoYrs = n;
        this.Amount = p;
    }
}
```

Circle.java

```
class Circle
{
    double radius;
    Circle(){}
    Circle(double r)
    {
        radius=r;
    }
}
```

```
}

void Area(){

    double area;
    System.out.println("\n Radius of circle = "+radius);
    area=3.14*radius*radius;
    System.out.println("\n Area of Circle = "+area);
}

public static void main(String args[])
{
    Circle obj=new Circle(10);
    obj.Area();
}
}
```

Practical14.java

```
import java.util.ArrayList;
```

```
import java.util.Date;
```

```
class Practical14
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        ArrayList<Object> obj = new ArrayList<Object>();
```

```
        obj.add(new Loan());
```

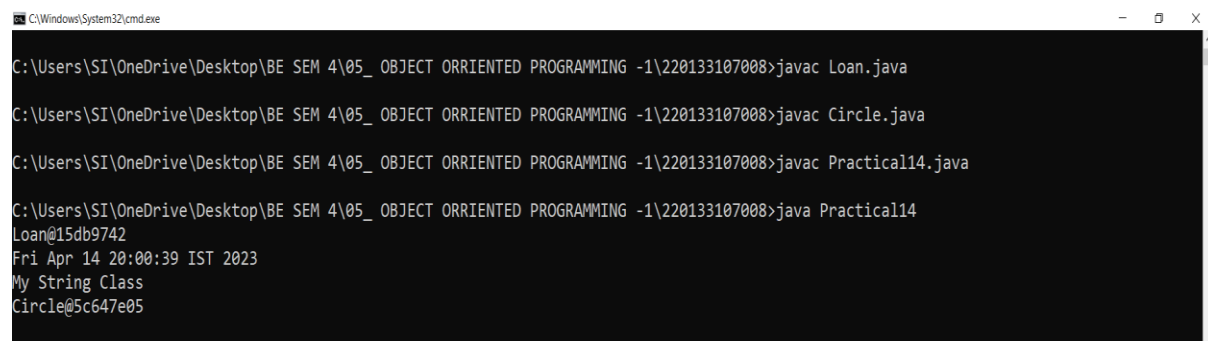
```
obj.add(new Date());

obj.add(new String("My String Class"));

obj.add(new Circle());

for(int i = 0; i<obj.size(); i++){
    System.out.println(obj.get(i).toString());
}
}}
```

Output :



```
C:\Windows\System32\cmd.exe
C:\Users\SI\OneDrive\Desktop\BE SEM 4\05_ OBJECT ORRIENTED PROGRAMMING -1\220133107008>javac Loan.java
C:\Users\SI\OneDrive\Desktop\BE SEM 4\05_ OBJECT ORRIENTED PROGRAMMING -1\220133107008>javac Circle.java
C:\Users\SI\OneDrive\Desktop\BE SEM 4\05_ OBJECT ORRIENTED PROGRAMMING -1\220133107008>javac Practical14.java
C:\Users\SI\OneDrive\Desktop\BE SEM 4\05_ OBJECT ORRIENTED PROGRAMMING -1\220133107008>java Practical14
Loan@15db9742
Fri Apr 14 20:00:39 IST 2023
My String Class
Circle@5c647e05
```