Name:- Manish Shashikant Jadhav

Roll no.:- 2201933

PRN no.:- 2030408246006

Subject:- Advanced Java Programming Lab

Experiment no.1

Aim:- Implementing Program that are easily extensible demonstrating Polymorphic behavior.

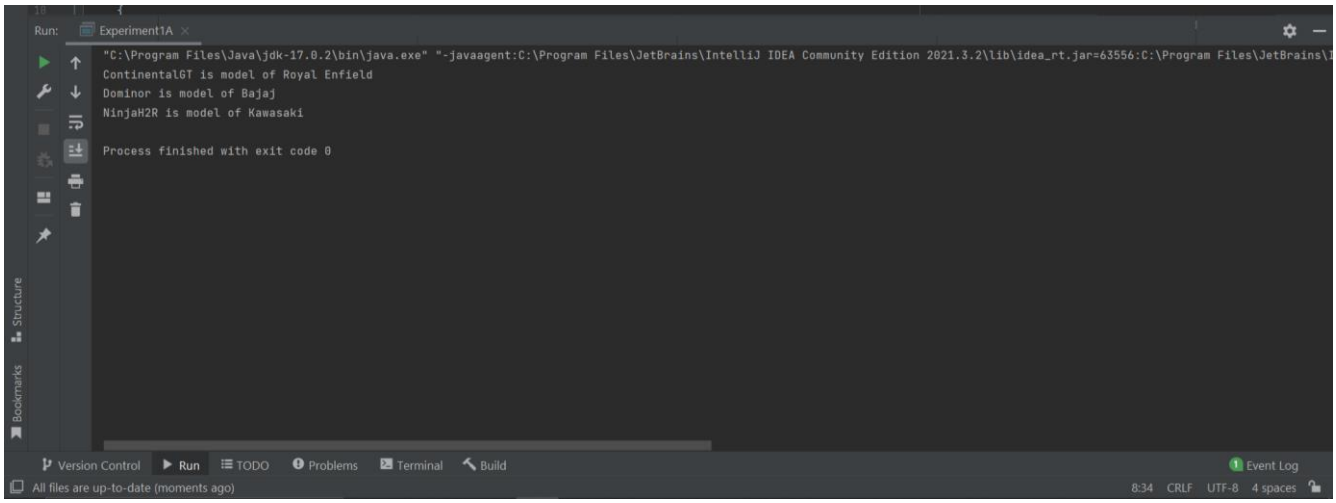
Program no.1 :- A program using Override method in Java:-

```
package com.AJPExperiments;
class bike{
   public void model()
   {
      System.out.println("We are bikes");
   }
}
class continentalGT extends bike{
   public void model()
   {
      System.out.println("ContinentalGT is model of Royal Enfield");
   }
}
class Dominor extends bike{
   public void model()
   {
      System.out.println("Dominor is model of Bajaj");
   }
}
class NinjaH2R extends bike{
   public void model()
   {
      System.out.println("NinjaH2R is model of Kawasaki");
   }
}

public class Experiment1A {
   public static void main(String[] args) {
      bike m;
      bike m1 = new continentalGT();
      m1.model();
```

```
        bike m2 = new Dominor();
        m2.model();
        bike m3 = new NinjaH2R();
        m3.model();
    }
}
```

Output:-



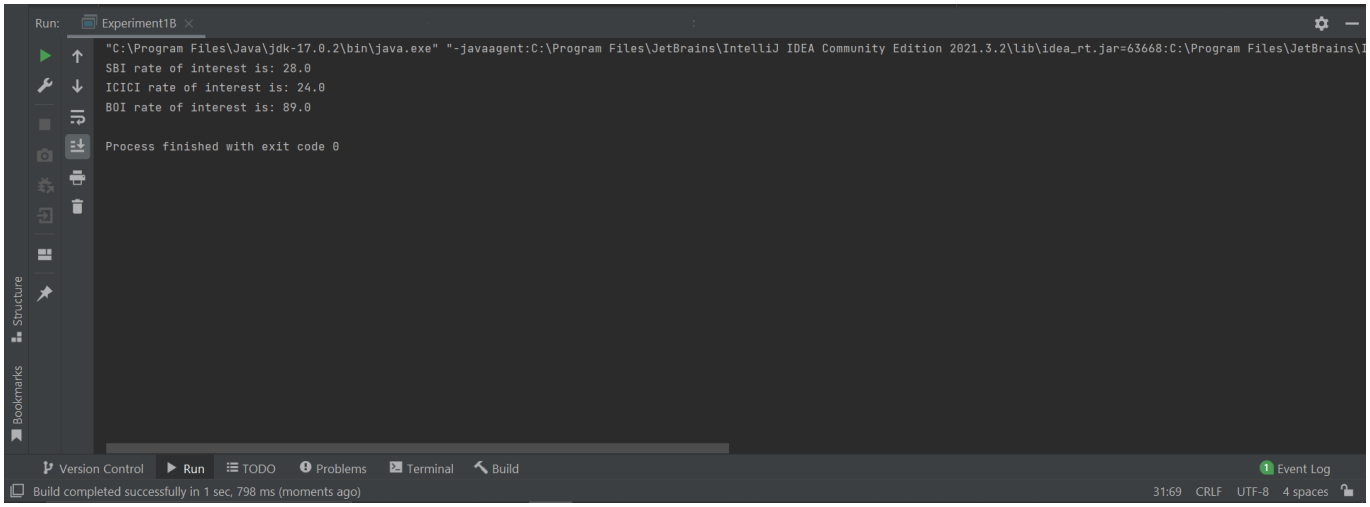
Program no.2 :- Write a program to print rate of interest of some banks using overriding method.

```
package com.AJPExperiments;

class bank1{
    float interest() {
        return 0;
    }
}
class SBI extends bank1 {
    float interest() {
        return (28.0f);
    }
}
class ICICI extends bank1 {
    float interest() {
        return (24.0f);
    }
}
class BOI extends bank1 {
    float interest() {
```

```
        return (89.0f);
    }
}
public class Experiment1B {
    public static void main(String[] args) {
        bank1 b;
        bank1 b1 = new SBI();
        System.out.println("SBI rate of interest is: "+b1.interest());
        bank1 b2 = new ICICI();
        System.out.println("ICICI rate of interest is: "+b2.interest());
        bank1 b3 = new BOI();
        System.out.println("BOI rate of interest is: "+b3.interest());
    }
}
```

Output:-



Program no.3 :- Write a program using method overloading.

```
package com.AJPExperiments;

class overload{
    void demo (int a)
    {
        System.out.println("a:"+a);
    }
    void demo (int a, int b)
    {
        System.out.println("a & b:"+a);
        System.out.println(b);
    }
```

```
    double demo (double a){
        System.out.println("double a: "+a);
        return a*a;
    }
}

public class Experiment1C {
    public static void main(String[] args) {
        overload s1 = new overload();
        double result;
        s1.demo(8);
        s1.demo(28, 24);
        result = s1.demo(5.5);
        System.out.println("The result is:"+ result);
    }
}
```

Output:-