

**Job No:-** 02

**Job Name:-** Java programs using inheritance and polymorphism.

**Objectives:-**

--Inheritance ও Polymorphism ব্যবহার করে জাভাতে প্রোগ্রাম লেখা ও Run করা।

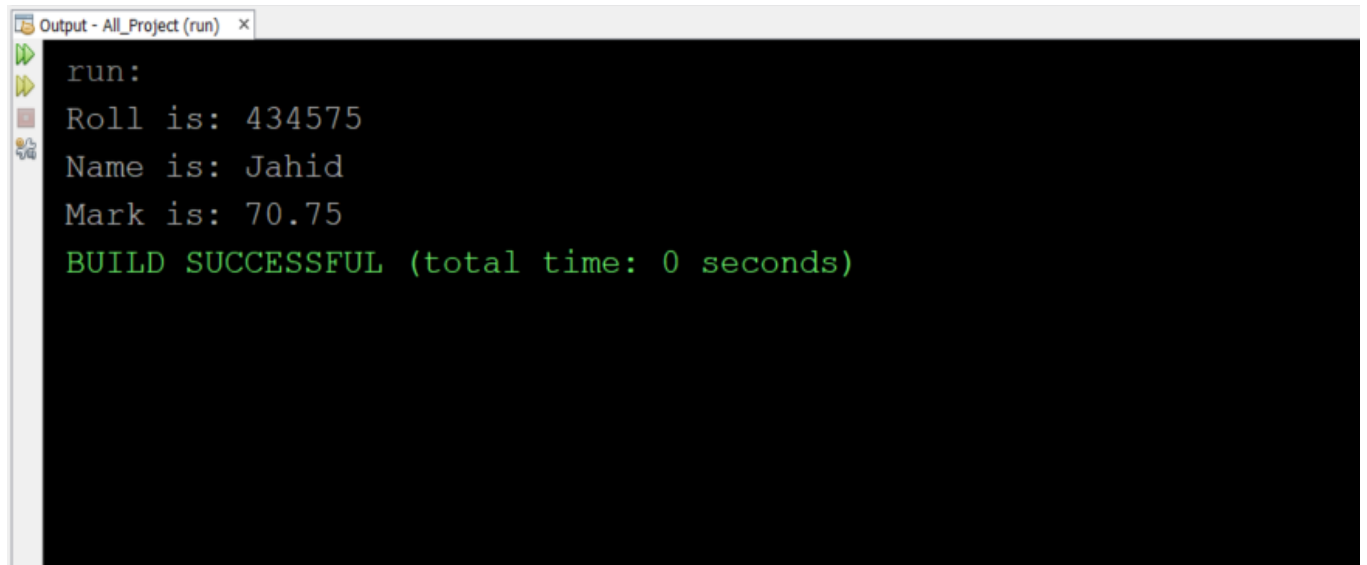
**Theory:-**

--NetBeans Open করতে হবে এবং নিম্নোক্ত প্রোগ্রামগুলো লিখতে হবে ও আউটপুট ডিসপ্লেতে দেখাতে হবে।

**প্রোগ্রাম-১:- Inheritance ব্যবহার করে জাভা প্রোগ্রামঃ**

```
package all_project.Collage;
class Student2{
    int Roll;
    String Name = new String();
}
class Result extends Student2{
    float Mark;
    void GetData(){
        Roll = 434575;
        Name = "Jahid";
        Mark = 70.75f;
    }
    void Display(){
        System.out.println("Roll is: "+Roll);
        System.out.println("Name is: "+Name);
        System.out.println("Mark is: "+Mark);
    }
}
public class Inheritance {
    public static void main(String[] args) {
        Result R = new Result();
        R.GetData();
        R.Display();
    }
}
//Program the End.
```

## Output:-

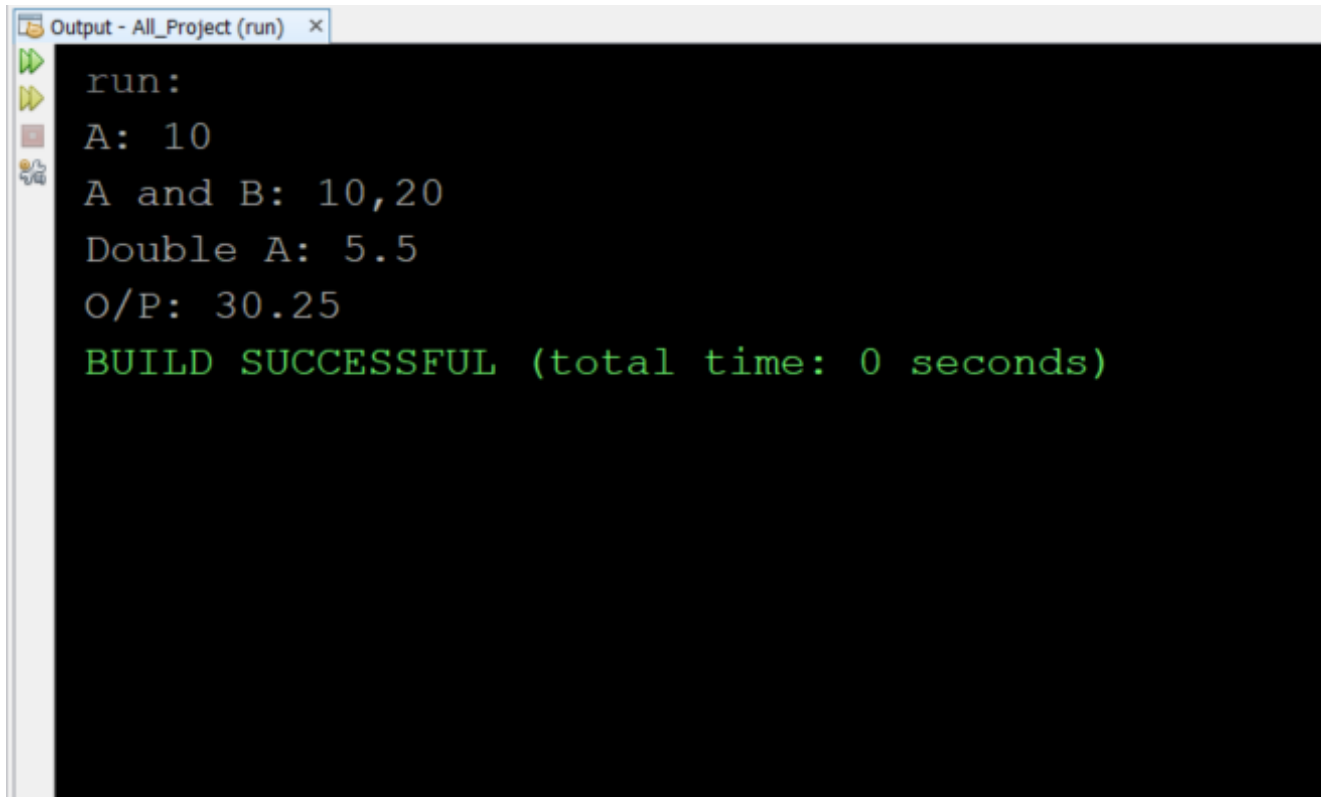


```
Output - All_Project (run) x
run:
Roll is: 434575
Name is: Jahid
Mark is: 70.75
BUILD SUCCESSFUL (total time: 0 seconds)
```

## প্রোগ্রাম-২:- Polymorphism ব্যবহার করে জাভা প্রোগ্রামঃ

```
package all_project.Collage;
public class Polymorphism {
    void demo (int a){
        System.out.println("A: "+a);
    }
    void demo (int a, int b){
        System.out.println("A and B: "+a+ ", "+b);
    }
    double demo(double a){
        System.out.println("Double A: "+a);
        return a*a;
    }
    public static void main(String[] args) {
        Polymorphism obj = new Polymorphism();
        double result;
        obj.demo(10);
        obj.demo(10, 20);
        result = obj.demo(5.5);
        System.out.println("O/P: "+result);
    }
}
```

## Output:-



The screenshot shows a window titled "Output - All\_Project (run)" with a dark background. On the left side of the window, there is a vertical toolbar with four icons: a green play button, a yellow play button, a red stop button, and a magnifying glass. The main area of the window contains the following text:

```
run:  
A: 10  
A and B: 10,20  
Double A: 5.5  
O/P: 30.25  
BUILD SUCCESSFUL (total time: 0 seconds)
```