

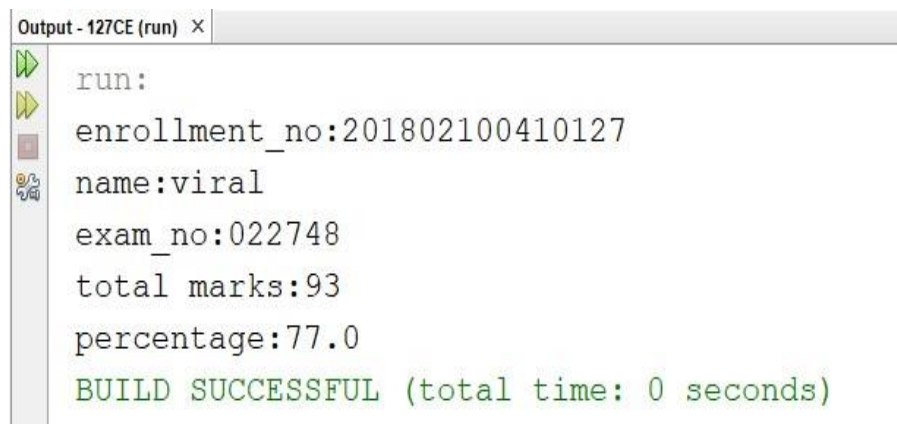
**PRACTICAL-9(A)**

**Aim:** Write three classes for examination result: Student, Exam and Result. Student class has data members enrollment no, exam number and student name. Create the class Exam by inheriting student class. Exam class adds fields representing the marks scored in three subjects. Derive Result from the Exam class and it has its own fields such as total\_marks and percentage.

**CODE:**

```
public class Student1 {  
    String enrollment_no="201802100410127";  
    String name="viral";  
    String exam_no="022748";  
  
}  
  
class exam extends Student1  
{  
    int java=24;  
    int os=21;  
    int cn=23;  
    int mpi=25;  
}  
  
class result extends exam  
{  
    int total;  
    double percentage;  
}  
  
class test  
{
```

```
public static void main(String[] args) {  
    result r=new result();  
    r.total=r.java+r.cn+r.os+r.mpi;  
    r.percentage=(r.total*100)/120;  
    System.out.println("enrollment_no:"+r.enrollment_no);  
    System.out.println("name:"+r.name);  
    System.out.println("exam_no:"+r.exam_no);  
    System.out.println("total marks:"+r.total);  
    System.out.println("percentage:"+r.percentage);  
}  
}
```

**OUTPUT:**

```
Output - 127CE (run) x  
run:  
enrollment_no:201802100410127  
name:viral  
exam_no:022748  
total marks:93  
percentage:77.0  
BUILD SUCCESSFUL (total time: 0 seconds)
```

**PRACTICAL-9(B)**

**Aim:** Create a class Grandfather which has the attributes surname and nationality. Create another class called Father which inherits Grandfather and has the attributes name, surname and nationality. Create class called Son which inherits Grandfather and has the attributes name, surname and nationality. Write a program to display the specified details.

**CODE:**

```
public class grandfather {  
    String surname="patel";  
    String nationality="indian";  
}  
class father extends grandfather  
{  
    String name="bhailalbhai";  
}  
class son extends grandfather  
{  
    String name="viral";  
}  
class display  
{  
    public static void main(String[] args) {  
        father f=new father();  
        son s=new son();  
        System.out.println("grandfather information");  
        System.out.println("    surname:"+f.surname);  
        System.out.println("    nationality:"+f.nationality);  
    }  
}
```

```
        System.out.println("father detail:");

        System.out.println("        surname:"+f.surname);

        System.out.println("        name:"+f.name);

        System.out.println("        nationality:"+f.nationality);

        System.out.println("son detail");

        System.out.println("        surname:"+s.surname);

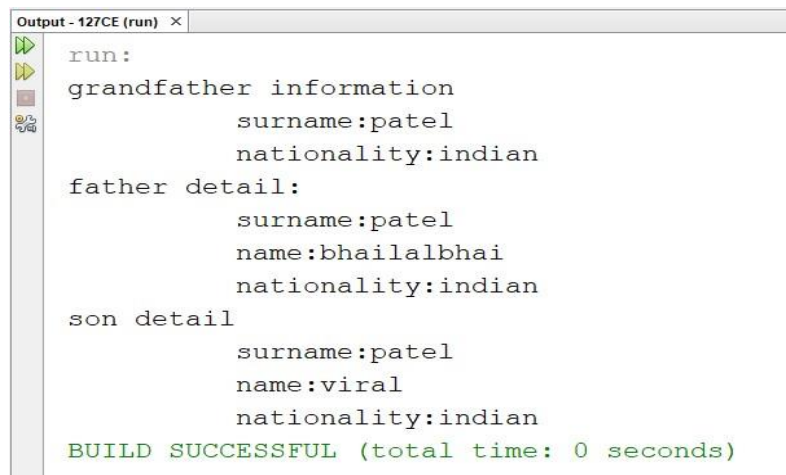
        System.out.println("        name:"+s.name);

        System.out.println("        nationality:"+s.nationality);

    }

}
```

### **OUTPUT:**



```
Output - 127CE (run) x
run:
grandfather information
    surname:patel
    nationality:indian
father detail:
    surname:patel
    name:bhailalbhai
    nationality:indian
son detail
    surname:patel
    name:viral
    nationality:indian
BUILD SUCCESSFUL (total time: 0 seconds)
```