

Practical Set: 3

Inheritance

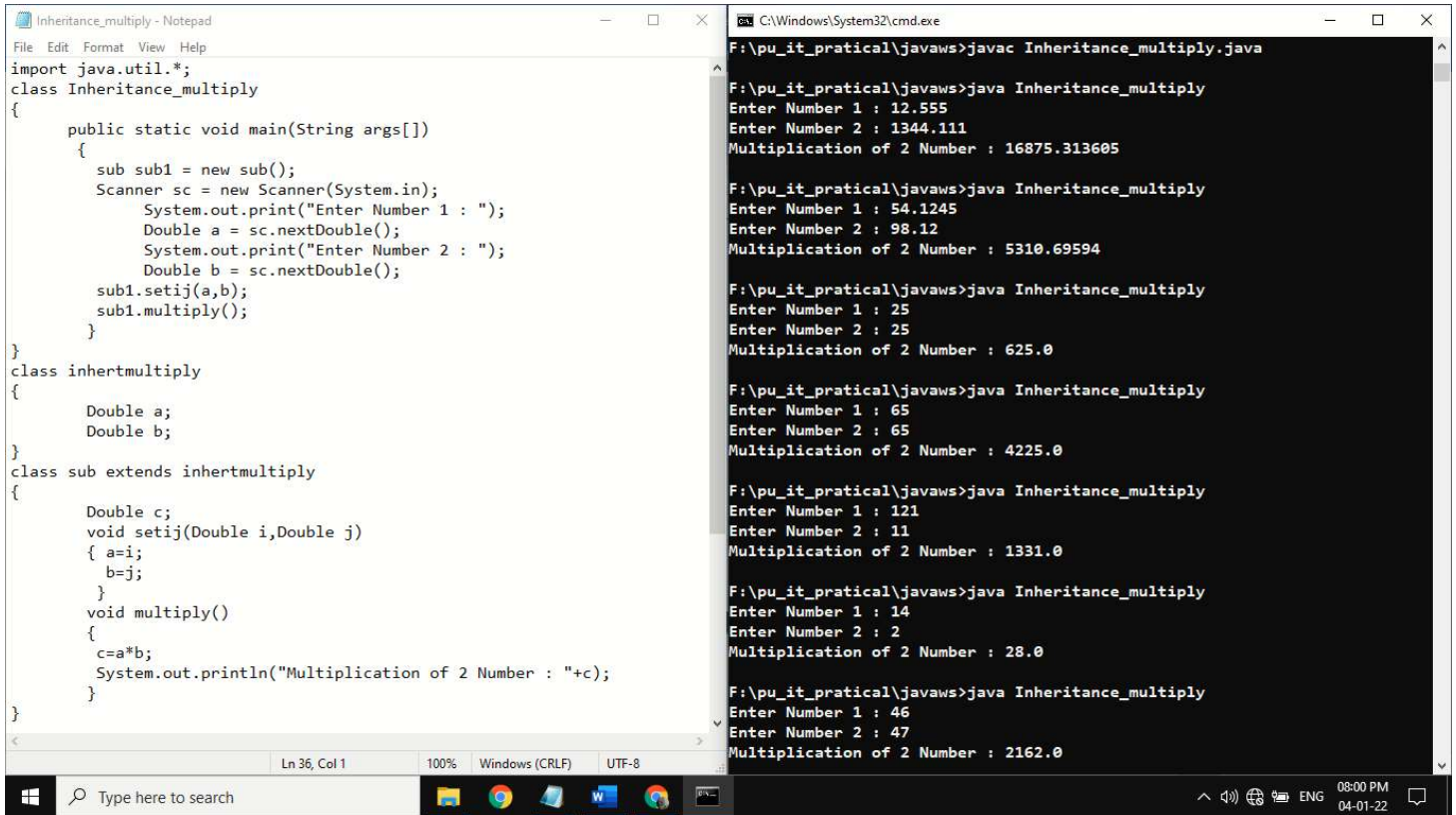
Practical 1:

AIM: Write java Program for single level inheritance.

Code:

```
import java.util.*;
class Inheritance_multiply
{
    public static void main(String args[])
    {
        sub sub1 = new sub();
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter Number 1 : ");
        Double a = sc.nextDouble();
        System.out.print("Enter Number 2 : ");
        Double b = sc.nextDouble();
        sub1.setij(a,b);
        sub1.multiply();
    }
}
class inhertmultiply
{
    Double a;
    Double b;
}
class sub extends inhertmultiply
{
    Double c;
    void setij(Double i,Double j)
    {
        a=i;
        b=j;
    }
    void multiply()
    {
        c=a*b;
        System.out.println("Multiplication of 2 Number : "+c);
    }
}
```

Output:



```
Inheritance_multiply - Notepad
File Edit Format View Help
import java.util.*;
class Inheritance_multiply
{
    public static void main(String args[])
    {
        sub sub1 = new sub();
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter Number 1 : ");
        Double a = sc.nextDouble();
        System.out.print("Enter Number 2 : ");
        Double b = sc.nextDouble();
        sub1.setij(a,b);
        sub1.multiply();
    }
}
class inhertmultiply
{
    Double a;
    Double b;
}
class sub extends inhertmultiply
{
    Double c;
    void setij(Double i,Double j)
    { a=i;
      b=j;
    }
    void multiply()
    {
        c=a*b;
        System.out.println("Multiplication of 2 Number : "+c);
    }
}

C:\Windows\System32\cmd.exe
F:\pu_it_pratical\javaws>javac Inheritance_multiply.java
F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 12.555
Enter Number 2 : 1344.111
Multiplication of 2 Number : 16875.313605

F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 54.1245
Enter Number 2 : 98.12
Multiplication of 2 Number : 5310.69594

F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 25
Enter Number 2 : 25
Multiplication of 2 Number : 625.0

F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 65
Enter Number 2 : 65
Multiplication of 2 Number : 4225.0

F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 121
Enter Number 2 : 11
Multiplication of 2 Number : 1331.0

F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 14
Enter Number 2 : 2
Multiplication of 2 Number : 28.0

F:\pu_it_pratical\javaws>java Inheritance_multiply
Enter Number 1 : 46
Enter Number 2 : 47
Multiplication of 2 Number : 2162.0
```

Practical Set: 4**Java Keyword****Practical 1:**

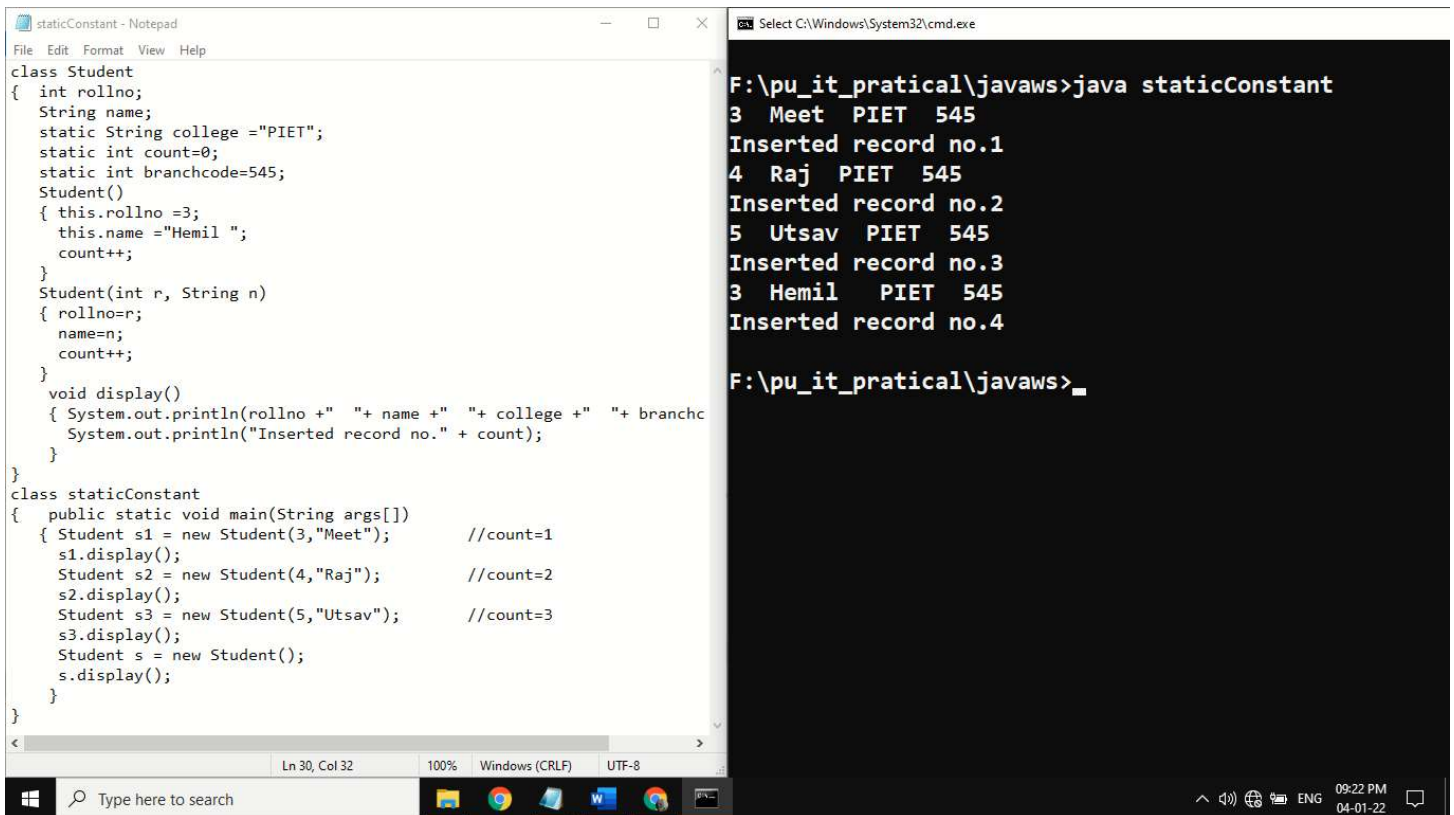
AIM: Write java program to demonstrate the use of static keyword.

Code:

```
class Student
{
    int rollno;
    String name;
    static String college ="PIET";
    static int count=0;
    static int branchcode=545;
    Student()
    {
        this.rollno =3;
        this.name ="Hemil ";
        count++;
    }
    Student(int r, String n)
    {
        rollno=r;
        name=n;
        count++;
    }
    void display()
    {
        System.out.println(rollno +" "+ name +" "+ college +" "+ branchcode);
        System.out.println("Inserted record no." + count);
    }
}
class staticConstant
{
    public static void main(String args[])
    {
        Student s1 = new Student(3,"Meet");    //count=1
        s1.display();
        Student s2 = new Student(4,"Raj");    //count=2
    }
}
```

```
s2.display();
Student s3 = new Student(5,"Utsav");    //count=3
s3.display();
Student s = new Student();
s.display();
}
}
```

Output:



```
staticConstant - Notepad
File Edit Format View Help
class Student
{ int rollno;
  String name;
  static String college = "PIET";
  static int count=0;
  static int branchcode=545;
  Student()
  { this.rollno =3;
    this.name ="Hemil ";
    count++;
  }
  Student(int r, String n)
  { rollno=r;
    name=n;
    count++;
  }
  void display()
  { System.out.println(rollno + " " + name + " " + college + " " + branchcode);
    System.out.println("Inserted record no." + count);
  }
}
class staticConstant
{ public static void main(String args[])
{ Student s1 = new Student(3,"Meet");    //count=1
  s1.display();
  Student s2 = new Student(4,"Raj");    //count=2
  s2.display();
  Student s3 = new Student(5,"Utsav");    //count=3
  s3.display();
  Student s = new Student();
  s.display();
}
}
```

```
Select C:\Windows\System32\cmd.exe
F:\pu_it_practical\javaws>java staticConstant
3 Meet PIET 545
Inserted record no.1
4 Raj PIET 545
Inserted record no.2
5 Utsav PIET 545
Inserted record no.3
3 Hemil PIET 545
Inserted record no.4
F:\pu_it_practical\javaws>
```