Singleton Class :

– A class which enable you to create only one object for that Class

– To Create Singleton classes then we have defined all possible constructors for
that class should be defined with private modifier so that we can avoid
Creating an object for that class from outside of the class

– Define one static factory method

– static factory method is a static method which returns an object of the Same
class

Advantages :

> Avoiding to creating duplicate object

> Memory optimization

> Increasing the efficiency of the program

```
class Maths
{
       static Maths m=new Maths();
       private Maths( )
              { }  //private constructor


    int sq(int x){ return x*x; }
    int cu(int x) { return (x*x*x); }


    static Maths getObject()  //static factory method
       { return m; }
}
class Testing{
       public static void main(String args[ ])
```

```java
    {
        Maths m1=Maths.getObject();
        System.out.println("Hash code : "+m1);
        int s=m1.sq(3);
        System.out.println("SQ(3) is ? : "+s);

        Maths m2=Maths.getObject();
        System.out.println("Hash code : "+m2);
        int c=m2.cu(3);
        System.out.println("CU(3) is ? : "+c);
    }
}
```