

```
// Eager initialization|
```

```
class Singleton {
```

```
    private static Singleton obj= new Singleton;
```

```
    private Singleton() {}
```

```
    public static Singleton getInstance()
```

```
{
```

```
        return obj;
```

```
}
```

```
}
```

```
// Lazy initialization
```

```
class Singleton {  
    private static Singleton obj;  
  
    private Singleton() {}  
  
    public static Singleton getInstance()  
    {  
        if (obj == null)  
            obj = new Singleton();  
        return obj;  
    }  
}
```

```
// Thread Synchronized Block
```

```
class Singleton {  
    private static Singleton obj;  
    private Singleton() {}  
  
    // Only one thread can execute this at a time  
    public static synchronized Singleton getInstance()  
    {  
        if (obj == null)  
            obj = new Singleton();  
        return obj;  
    }  
}
```

```
// Double Checked Locking
```

```
class Singleton {  
    private static volatile Singleton obj = null;  
    private Singleton() {}  
  
    public static Singleton getInstance()  
    {  
        if (obj == null) {  
            // To make thread safe  
            synchronized (Singleton.class)  
            {  
  
                if (obj == null)  
                    obj = new Singleton();  
            }  
        }  
        return obj;  
    }  
}
```

```
// Bill pugh Solution
```

```
public class Singleton {  
  
    private Singleton() {  
        System.out.println("Instance created");  
    }  
  
    private static class SingletonInner{  
  
        private static final Singleton INSTANCE=new Singleton();  
    }  
    public static Singleton getInstance()  
    {  
        return SingletonInner.INSTANCE;  
    }  
}
```