JAVA.LANG.STRING.HASHCODE METHOD

Description

The **java.lang.String.hashCode** method returns a hash code for this string. The hash code for a String object is computed as:

s[0]*31^$n-1$ + s[1]*31^$n-2$ + ... + s[n-1] where, s[i] is the ith character of the string, n is the length of the string, and ^ indicates exponentiation

Declaration

Following is the declaration for **java.lang.String.hashCode** method

```
public int hashCode()
```

Parameters

- **NA**

Return Value

This method returns a hash code value for this object.

Exception

- **NA**

Example

The following example shows the usage of java.lang.String.hashCode method.

```
package com.tutorialspoint;

import java.lang.*;

public class StringDemo {

   public static void main(String[] args) {

   Integer i = new Integer(50);
   Long l = new Long(50);
   Float f = new Float(50);
   Integer i2 = new Integer(0);

   // hash codes of different objects with same value are always same
   System.out.println("Hash code of " + i + " is =  " + i.hashCode());
   System.out.println("Hash code of " + l + " is =  " + l.hashCode());

   // hash code for float value i.e different from Integer and Long
   System.out.println("Hash code of " + f + " is =  " + f.hashCode());

   // hash code value of number zero(0) is zero(0)
   System.out.println("Hash code of " + i2 + " is = " + i2.hashCode());

   String str = "this is tutorialspoint";

   // hash code of string str
   System.out.println("Hash code of string is = " + str.hashCode());
   }
}
```

Let us compile and run the above program, this will produce the following result:

```
Hash code of 50 is = 50
Hash code of 50 is = 50
Hash code of 50.0 is = 1112014848
Hash code of 0 is = 0
Hash code of string is = 643938959
```