

# DAY-47

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## **STRING CLASS**

- IT IS AVAILABLE IN JAVA.LANG PACKAGE
- IT IS A FINAL CLASS
- STRING IS THE ONLY CLASS IN ENTIRE JAVA HIERARCHY WHERE OBJECT CAN BE CREATED BOTH USING NEW KEYWORD AND WITHOUT USING NEW KEYWORD.
  - String s = "java";
  - String s = new String("java");

## **THE FOLLOWING 3 METHODS OF OBJECT CLASS HAVE BEEN OVERRIDDEN IN STRING CLASS**

1. Public String toString() : THIS METHOD HAS BEEN OVERRIDDEN TO DISPLAY THE CONTENT OF OBJECT.
2. Public int hashCode() :
  - i. THIS METHOD HAS BEEN OVERRIDDEN TO GENERATE HASHCODE BASED ON CONTENT OF OBJECT.
  - ii. IF 2 STRING OBJECTS ARE HAVING SAME CONTENT , HASHCODE WILL BE SAME OTHERWISE DIFFERENT.
3. Public boolean equals(Object obj) : THIS METHOD HAS BEEN OVERRIDDEN IN STRING CLASS TO COMPARE THE CURRENT OBJECT WITH GIVEN OBJECT BASED ON CONTENT OF OBJECT.

package string;

```
public class Test1
{
```

```
    public static void main(String[] args)
    {
        String s = "core java"; //without new keyword
        String a = "html";
        String s1 = new String("core java"); //with new keyword
        System.out.println(s);
        System.out.println(s1);

        System.out.println("toString of String class");
        System.out.println(s.toString());

        System.out.println("hashCode of String class");
        System.out.println(s.hashCode());
        System.out.println(s1.hashCode());
        System.out.println(s.equals(s1));
        System.out.println(s.equals(a));
        System.out.println(a.hashCode());
    }
```

```
}
```

## **STRING CLASS METHODS**

- `_public int length()`
- `public char charAt(int Index)`
- `public char[] toCharArray()`
- `public int indexOf(char charname)`
- `public int lastIndexOf(char charname)`
- `public String substring(int beginning index)`
- `public String substring(int beginning index, int last index)`
- `public boolean contains(String stringname)`
- `public String toLowerCase()`
- `public String toUpperCase()`
- `public String concat(String stringname)`
- `public int compareTo(String stringname)`
- `public String replace(char old char, char new char)`
- `public String[] split(char)`

package string;

public class StringMethods {

```

    public static void main(String[] args)
    {
        String s = "ironman";
        String s1 = "IRONMAN";
        String s2 = "hebbal";
        String s3 = "hi everyone how are you all";

        System.out.println("length of String is "+s.length());
        System.out.println("char present at index 3 is "+s.charAt(3));

        char ch[] = s.toCharArray();
        for (int i = 0; i < ch.length; i++)
        {
            System.out.println(ch[i]);
        }

        System.out.println("index of i in String is "+ s.indexOf('i'));
        System.out.println("index of n in String is "+ s.indexOf('n'));
        System.out.println("last index of n in String is "+ s.lastIndexOf('n'));
        System.out.println("substring from index 4 is "+s.substring(4));
        System.out.println("substring from index 6 is "+s.substring(6));
        System.out.println("substring of string from index 2 to 5 is "+s.substring(2, 5));
        System.out.println("do string contain man ? "+s.contains("man"));
        System.out.println("lowercase s1 is "+s1.toLowerCase());
        System.out.println("uppercase s is "+s.toUpperCase());
        System.out.println("concat of s and s2 is "+s.concat(s2));
        System.out.println(s.compareTo(s2));
        System.out.println(s2.compareTo(s));
        System.out.println(s2.replace('b', 's'));

        String[] ch1 = s3.split(" ");
        for (int i = 0; i < ch1.length; i++)
        {
            System.out.println(ch1[i]);
        }
    }

```

```
}  
  
}
```

- WRITE A PROGRAM TO FIND THE STRING IS PALINDROME OR NOT

```
package string;
```

```
public class StringMethods {
```

```
    public static void main(String[] args)  
    {  
        String a = "madam";  
        String b = "madam";  
  
        if (a.equals(b))  
        {  
            System.out.println("palindrome");  
        }  
        else  
        {  
            System.out.println("not a palindrome");  
        }  
    }  
}
```

```
}
```

### **QUESTIONS**

- GIVEN THE STRING IS "HI HOW ARE YOU, HAD TEA" REPLACE H WITH B.
- TAKE STRING FROM THE USER AND FIND HOW MANY WORDS ARE THERE IN A STRING