

## Strings

### String Constructors

```
char chars[] = {'b', 'm', 's', 'c', 'e'};
```

```
String s1 = new String(chars);
```

```
String s2 = new String(chars, 1, 3);
```

output: bmse  
msc

### String length

```
char chars[] = {'p', 'y', 't', 'h', 'o', 'n'};
```

```
String s = new String(chars);
```

```
System.out.println(s.length());
```

output: 6

### String Literal & Concatenation

```
System.out.println("abc".length());
```

```
String car = "BMW";
```

```
System.out.println("He has " + car + " car");
```

output: 2

He has a BMW car

getchars

String cdg = "Welcome bmsce college";

getchars(11, 17, buff, 0);

output : bmsce

equals & equalsIgnoreCase:

Bmsce equals Bmsce → true

Bmsce equals College → false

Bmsce equals BMSCE → false

Bmsce equalsIgnoreCase BMSCE → true

region matches

Boolean ismatch = str.regionMatches(11, str2, 0, 13);

Output : substring is matched.

startswith and endswith?

String game = "Basketball".

System.out.println(game.startsWith("Basket"));

System.out.println(game.endsWith("ball"));

output:

true

true

Equals v/s

Hello equals Hello → true

Hello == Hello → false



## Sort

apple ball cat dog end free gun hen ice jug kHe  
lift man net orange parrot queen ring star  
umbrella van watch xmas tree yak zee

12)

2 3 4 5 6 7 8 9

13

This is a test . This is, too

14

World

15

College

16

Hallo friends

17

Student 1

name: Swaraj

Regno: 253

Sem: 3

CGPA: 8.135

Student 2

name: suresh

Regno: 230

Sem: 3

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Write a java program to create a generic class stack  
which holds 5 integer & 5 double values

```
import java.util.*;
```

```
class Stack<E>{
```

```
    E stk[];
```

```
    int top;
```

```
    int size = 10;
```

```
    Stack() {
```

```
        stk = (E[]) new Object[size];
```

```
        top = -1;
```

```
    }
```

```
    void push (E item) {
```

```
        if (top == size - 1)
```

```
            System.out.println ("overflow");
```

```
        else
```

```
            stk[++top] = item;
```

```
    }
```

```
    E pop() {
```

```
        if (top < 0)
```

```
        {
```

```
            System.out.println ("underflow");
```

```
            return null;
```

```
        }
```

```
        else
```

```
        {
```

```
            return stk[top--];
```

```
        }
```

```
    }
```



```

public class TestStack {
    public static void main (String[] args)
    {
        Stack<Integer> myStack1 = new Stack<Integer> (5);
        Stack<Integer> myStack2 = new Stack<Integer> (5);

        Scanner s = new Scanner(System.in);
        System.out.println("Enter elements into the integer Stack");
        for (int i=0; i<5; i++)
        {
            int n = s.nextInt();
            myStack1.push(n);
        }

        System.out.println("Enter elements in the double Stack");
        for (int i=0; i<5; i++)
        {
            double m = s.nextDouble();
            myStack2.push(m);
        }

        System.out.println("Elements of myStack1");
        for (int i=0; i<5; i++)
        {
            System.out.println(myStack1.pop());
        }

        System.out.println("Elements of myStack2");
        for (int i=0; i<5; i++)
        {
            System.out.println(myStack2.pop());
        }
    }
}

```

public class TestStack

{  
public static void main (String[] args)

{  
Stack<Integer> myStack = new Stack<Integer>();

Stack<Integer> myStack2 = new Stack<Integer>();

Scanner s = new Scanner(System.in);

System.out.println("Enter elements in the original stack");

for (int i=0; i<5; i++)

{  
int n = s.nextInt();

myStack.push(n);

}

System.out.println("Enter elements in the second stack");

for (int i=0; i<5; i++)

{

double m = s.nextDouble();

myStack2.push(m);

}

System.out.println("Elements of myStack");

for (int i=0; i<5; i++)

{  
System.out.print(myStack.pop());

}

System.out.println("Elements of myStack2");

for (int i=0; i<5; i++)

{

System.out.print(myStack2.pop());

}

}



```

public class TestStack {
    public static void main (String[] args)
    {
        Stack<Integer> mystack1 = new Stack<Integer>();
        Stack<Integer> mystack2 = new Stack<Integer>();

        Scanner s = new Scanner(System.in);

        System.out.println("Enter elements into the integer stack");
        for (int i=0; i<5; i++)
        {
            int n = s.nextInt();
            mystack1.push(n);
        }

        System.out.println("Enter elements in the double stack");
        for (int i=0; i<5; i++)
        {
            double m = s.nextDouble();
            mystack2.push(m);
        }

        System.out.println("Elements of mystack1");
        for (int i=0; i<5; i++)
        {
            System.out.println(mystack1.pop());
        }

        System.out.println("Elements of mystack2");
        for (int i=0; i<5; i++)
        {
            System.out.println(mystack2.pop());
        }
    }
}

```