16/01/24

SURYA Gold
Date Page

```
import java.util.Scanner
Public class Generic Stack<T>{
    object[] stackArray
```

1) write a Java Program to create a generic class stack which holds 5 integers and 5 double value

```
import java.util.Scanner;
import java.util.Arrays;

class stack <T>{
    static final int N=5;
    Private int top = -1;
    Private object[] stackArray)

    Public Generic stack()
    {
        stackarray = new object[N];
    }
    Public void push(T value)
    {
        if(top<n-1)
            stackArray[++top] = value;
        else
            System.out.println("stack overflow");
    }
    Public T POP()
    {
        if(top >=0
            return(T) stackArray[TOP--]
        else
            (System.out.println("stack empty
            return 0);
    } }
```

public boolean isEmpty()
{ return top == -1; }

public boolean isFull()
{ return top == N-1; }

class Main
{
public static void main(String args[]){

Generic Stack<Integer> integerStack
= new Generic Stack<>();
Generic Stack<Double> doubleStack =
new Generic Stack<>();

for(int i=0; i<=5; i++)
integerStack.push(i);
for(double i=1.0; i<5.0; i++)
doubleStack.push(i);

System.out.println("Popped Integers from stack");
while(!integerStack.isEmpty()){
System.out.println(integerStack.pop());
}
System.out.println("Popped double");
while(!doubleStack.isEmpty()){
System.out.println(doubleStack.pop());
}
}
}

output
popped integers from the stack:
5
4
3
2
1
popped double from the stack:
5.0
4.0
3.0
2.0
1.0

String

Public class string {
Public static void main (String Args[]) {
String a = "Hello";
System.out.println(a.length());
System.out.println("Str concat:");
String age = "9";
String msg = "He is" + age + "years old";
System.out.println("msg");
output:
demostrate string length:
5
Str concat:
He is 9 years old