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**Roll No:24**

**Batch:B**

**Date:07/06/22**

**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 5**

**Aim**

Program to create a generic stack and do the Push and Pop operations.

**PROCEDURE**

import java.util.Scanner;

class Stackop {

int a[] = new int[20];

int top=-1,ch,item,i;

Scanner sc = new Scanner(System.in);

public void stackoperation()

{

System.out.println("Enter the size of the array : ");

int n=sc.nextInt();

do

{

System.out.println("\nCHOICES : "+"\n"+"---------------------");

System.out.println("\n" + "1.PUSH"+"\n" + "2.POP" + "\n" + "3.DISPLAY" + "\n" + "4.Exit");

System.out.println("\n Enter your choice : ");

ch=sc.nextInt();

switch(ch)

{

case 1: if(top >=n-1)

{

System.out.println("STACK OVERFLOW");

}

else

{

System.out.println("Enter the element :");

item =sc.nextInt();

top=top+1;

a[top]=item;

}

break;

case 2 : if(top<0)

{

System.out.println("STACK UNDERFLOW");

}

else

{

a[top]='\0';

top=top-1;

}

break;

case 3:

if(top < 0)

{

System.out.println("STACK IS EMPTY");

}

else

{

System.out.println("\nSTACK"+"\n"+"----------------");

for(i=top;i>=0;i--)

{

System.out.println(a[i]);

}

}

break;

case 4 : return;

default : System.out.println("\n Invalid choice");

}

}

while(ch!=4);

}

}

class Stack

{

public static void main(String[] args)

{

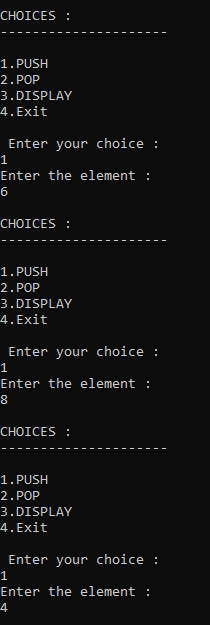
Stackop s =new Stackop();

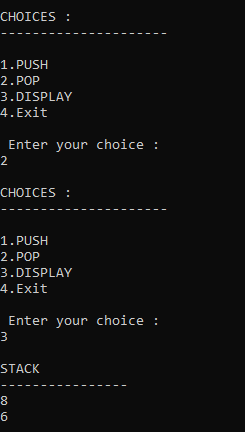
s.stackoperation();

}

}

**OUTPUT**

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