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**Roll No:51**

**Batch:R MCA-B**

**Date:31/05/22**

**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 21**

**Aim**

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

**PROCEDURE**

import java.util.Scanner;

class StackArr

{

int a[] = new int[20];

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

Scanner sc = new Scanner(System.in);

public void stackoperation()

{

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

int n=sc.nextInt();

do

{

System.out.print("\t \*\*CHOICES\*\* ");

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

System.out.print(" Enter your choice : ");

ch=sc.nextInt();

switch(ch)

{

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

{

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

}

else

{

System.out.print("enter the element :");

item =sc.nextInt();

top=top+1;

a[top]=item;

}

System.out.println(" item pushed");

break;

case 2 : if(top<0)

{

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

}

else

{

a[top]='\0';

top=top-1;

}

System.out.println(" item popped");

break;

case 3 :

if(top < 0)

{

System.out.println("\n stack is empty");

}

else

{

System.out.println(" STACK ");

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

{

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

}

}

break;

case 4 :

System.out.print("Terminate the stack");

break;

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

}

}

while(ch!=4);

}

}

class CO45

{

public static void main(String[] args)

{

StackArr sa =new StackArr();

sa.stackoperation();

}

}

**Output**

