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LAB-2

Write a program to simulate the working of stack using an array with the following : a) Push b) Pop c) Display The program should print appropriate messages for stack overflow, stack underflow

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

#define SIZE 10

int top=-1, s[10];

void push(int);

void pop();

void display();

void main()

{

int choice,n;

while(1)

{

printf("\n\n\*\*\*\*\*\*MENU\*\*\*\*\*\*\n\n");

printf("1.Push\n2.Pop\n3.Display\n4.Exit\n");

printf("Enter your choice\n");

scanf("%d",&choice);

switch(choice)

{

case 1:printf("Enter number to be pushed into stack\n");

scanf("%d",&n);

push(n);

break;

case 2:pop();

break;

case 3:display();

break;

case 4:exit(0);

default:printf("Wrong selection.Try again\n");

}

}

}

void push(int n)

{

if(top == SIZE-1)

printf("Stack is full\n");

else

{

top++;

s[top]=n;

printf("Insertion is successful\n");

}

}

void pop()

{

if(top==-1)

printf("Stack is empty\n");

else

{

printf("%d is deleated\n",s[top]);

top--;

}

}

void display()

{

if(top==-1)

printf("Stack is empty\n");

else

{

int i;

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

{

printf("%d\n",s[i]);

}

}

}





