Assinment No.-

Title-Implementation of stack using array

Roll No-69

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#include<iostream.h>

#include<conio.h>

class STACK

{

int A[6],size,top;

public:

STACK();

void PUSH(int);

int POP();

int PEEP();

void VIEW\_ALL();

};

STACK :: STACK()

{

size=5;

top=0;

}

void STACK::PUSH(int ele)

{

if(top==size)

cout<<"\nStack is full";

else

{

top=top+1;

A[top]=ele;

}

}

int STACK::POP()

{

int ele;

if(top==0)

{

cout<<"\nStack is empty";

return NULL;

}

else

{

ele=A[top];

top=top-1;

return ele ;

}

}

int STACK::PEEP()

{

if(top == 0)

{

cout<<"\nStack is empty";

return NULL;

}

else

return A[top];

}

void STACK::VIEW\_ALL()

{

if(top == 0)

cout<<"\nStack is empty";

else

for(int i=top;i>=1;i--)

cout<<A[i]<<" ";

}

void MENU()

{

int ele,opt;

STACK obj;

do

{

cout<<"\n select the option :";

cout<<"\n 1 PUSH";

cout<<"\n 2 POP";

cout<<"\n 3 PEEP";

cout<<"\n 4 VIEW\_ALL";

cout<<"\n 5 EXIT MENU";

cout<<"Enter your option";

cin>>opt;

switch(opt)

{

case 1:

cout<<"\nEnter ele to push";

cin>>ele;

obj.PUSH(ele);

break;

case 2:

cout<<endl<<obj.POP()<<"deleted";

break;

case 3:

cout<<endl<<obj.PEEP()<<"is the top element";

break;

case 4:

cout<<endl<<"The stack element is";

obj.VIEW\_ALL();

break;

case 5:

return;

default:

cout<<endl<<"Invalid choice";

}

} while(1);

}

void main()

{

clrscr();

MENU();

getch();

}