Assignment No:1.1

Title: Implementation of Stack Using Array

Roll No:58

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#include<conio.h>

#include<iostream.h>

class STACK

{

int a[5],size,top;

public:

STACK();

void PUSH(int);

int POP();

int PEEP();

void VIEWALL();

};

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::VIEWALL()

{

if(top==0)

cout<<"\nStack is Empty:";

else

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

cout<<a[i]<<" ";

}

void MENU()

{

int choice,ele;

STACK obj;

do

{

cout<<"\nSelect your Choice:";

cout<<"\n 1.PUSH";

cout<<"\n 2.POP";

cout<<"\n 3.PEEP";

cout<<"\n 4.VIEWALL";

cout<<"\n 5.EXIT";

cout<<"\nEnter your choice:";

cin>>choice;

switch(choice)

{

case 1:

cout<<"\nEnter the Elemrnt to PUSH: ";

cin>>ele;

obj.PUSH(ele);

break;

case 2:

cout<<endl<<obj.POP()<<"\nElement DELETED";

break;

case 3:

cout<<endl<<obj.PEEP()<<"\n:is the top of the element";

break;

case 4:

cout<<endl<<"\nThe STACK Element are:";

obj.VIEWALL();

break;

case 5:

return;

default:

cout<<endl<<" Invalid Choice";

}

}while(1);

}

void main()

{

clrscr();

MENU();

getch();

}