WA menu based OOP for **ARRAY implementation of STACK**.

**#include<iostream.H>**

**#include<conio.H>**

**const N=10;**

**class STACK**

**{ float A[N];**

**int top;**

**public:**

**STACK(){top=-1;}**

**void PUSH();**

**void POP();**

**void DISPLAY();**

**};**

**void STACK::PUSH()**

**{ if(top==N-1) //Checks overflow**

**cout<<"Overflow,addition not possible\n";**

**else**

**{top++;**

**cin>>A[top];}**

**}**

**void STACK::POP()**

**{ if(top==-1) //Checks underflow**

**cout<<"Underflow! stack is empty\n";**

**else**

**top--;**

**}**

**void STACK::DISPLAY()**

**{ if (top==-1) //Checks underflow**

**cout<<"Stack is empty\n";**

**else**

**{for(int i=top;i>=0;i--)**

**cout<<A[i]<<endl;}**

**}**

**void main()**

**{ int choice;**

**STACK S;**

**do**

**{**

**cout<<"1.PUSH\n";**

**cout<<"2.POP\n";**

**cout<<"3.DISPLAY \n";**

**cout<<"4.QUIT\n";**

**choice=getch();**

**switch(choice)**

**{**

**case '1': S.PUSH(); break;**

**case '2': S.POP(); break;**

**case '3': S.DISPLAY(); break;**

**case '4': break;**

**default :cout<<"\nWrong Choice Entered !!\n\n";**

**}**

**}while(choice!='4');**

**}**

WA menu based OOP for **ARRAY implementation of QUEUE**.

**#include<iostream.H>**

**#include<conio.H>**

**const N=10;**

**class Queue**

**{ float A[N];**

**int rear ;**

**public:**

**Queue(){rear=-1;}**

**void addq();**

**void delq();**

**void dispq();**

**};**

**void Queue::addq() //Addition at the rear**

**{ if(rear==N-1)**

**cout<<"overflow,addition not possible";**

**else**

**{rear++;**

**cin>>A[rear];}**

**}**

**void Queue::delq() //Deletion at the front**

**{ if(rear==-1)**

**cout<<"Underflow! Queue is empty";**

**else**

**{rear--;**

**for (int i=0;i<=rear;i++)**

**A[i]=A[i+1];}**

**}**

**void Queue::dispq() //Displays the Queue**

**{ if (rear==-1)**

**cout<<"Queue is empty";**

**else**

**{for(int i=0;i<=rear;i++)**

**cout<<A[i]<<endl;}**

**}**

**void main()**

**{ int choice;**

**Queue q;**

**do{ cout<<"1.ADD\n";**

**cout<<"2.DELETE\n";**

**cout<<"3.DISPLAY \n";**

**cout<<"4.QUIT\n";**

**choice=getch();**

**switch(choice)**

**{**

**case '1': q.addq(); break;**

**case '2': q.delq(); break;**

**case '3': q.dispq(); break;**

**case '4': break;**

**default :cout<<"\nWrong Choice Entered !!\n\n";**

**}**

**}while(choice!='4');**

**}**