**/\*WAP to reverse a list using stack\*/**

**#include <iostream>**

**#define MAXSIZE 8**

**using namespace std;**

**int stack[MAXSIZE];**

**int top = -1,data;**

**int isempty()**

**{**

**if(top == -1)**

**return 1;**

**else**

**return 0;**

**}**

**int isfull()**

**{**

**if(top == MAXSIZE)**

**return 1;**

**else**

**return 0;**

**}**

**void pop()**

**{**

**cout<<"Reverse list is \n";**

**while (!isempty())**

**{**

**data=stack[top];**

**top--;**

**cout<<data<<endl;**

**}**

**}**

**void push()**

**{**

**if (!isfull())**

**{**

**cout<<"Enter data to push: ";**

**cin>>data;**

**top++;**

**stack[top]=data;**

**}**

**else**

**{**

**cout<<"Could not insert data, Stack is full."<<endl;**

**}**

**}**

**int main()**

**{**

**int a;**

**while(1)**

**{**

**cout<<"Enter following keys to perform various operations.\n";**

**cout<<"1 for push item in stack.\n";**

**cout<<"2 reverse your list.\n";**

**cin>>a;**

**if (a==1)**

**{**

**push();**

**}**

**else if (a==2)**

**{**

**pop();**

**}**

**cout<<endl<<endl;**

**}**

**return 0;**

**}**

**/\*WAP to reverse a list using stack\*///or**

**#include<iostream>**

**#define max 10**

**using namespace std;**

**template<class T>**

**class Stack**

**{**

**T data[max];**

**int top;**

**public:**

**Stack():top(-1) {}**

**void push(T value)**

**{**

**if(top==max-1)**

**{**

**cout<<"overflow"<<endl;**

**}**

**else**

**data[++top]=value;**

**}**

**T pop()**

**{**

**if(top==-1)**

**{**

**cout<<"underflow"<<endl;**

**return -1;**

**}**

**else**

**{**

**return data[top--];**

**}**

**}**

**void peek()**

**{**

**if(top==-1)**

**{**

**cout<<"underflow"<<endl;**

**}**

**else**

**{**

**cout<<data[top]<<" is in top"<<endl;**

**}**

**}**

**void display()**

**{**

**cout<<"------------------XX---------------"<<endl;**

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

**{**

**cout<<data[i]<<endl;**

**}**

**cout<<"------------------XX---------------"<<endl;**

**}**

**};**

**int main()**

**{**

**Stack<int> arr;**

**int list[5];**

**int revlist[5];**

**cout<<"enter 5 integers for your list: ";**

**for(int i=0; i<5; i++)**

**{**

**cin>>list[i];**

**arr.push(list[i]);**

**}**

**for(int i=0; i<5; i++)**

**{**

**revlist[i]=arr.pop();**

**}**

**cout<<"its reverse is::"<<endl;**

**for(int i=0; i<5; i++)**

**{**

**cout<<revlist[i]<<endl;**

**}**

**return 0;**

**}**