#include<iostream>

#include <string.h>

#define max 10

using namespace std;

class Stack

{

public:

int top;

char stk[10];

Stack()

{

top=-1;

}

int empty()

{

if(top==-1)

return(1);

else

return(0);

}

int full()

{

if(top==max-1)

return(1);

else

return(0);

}

void push(char ch)

{

if(full())

cout<<"\nStack Is Full"<<endl;

else

{

top=top+1;

stk[top]=ch;

}

}

char pop()

{

char ch;

if(empty())

{

cout<<"Stack Is Empty"<<"\0"<<endl;

return -1;

}

else

ch=stk[top--];

return ch;

}

};

int main()

{

Stack s;

int k=0,flag;

char str[10],rev[10],ch;

cout<<"Enter String:"<<endl;

cin>>str;

for(int i=0;str[i]!='\0';i++)

{

ch=str[i];

s.push(ch);

}

while(s.top!=-1)

{

ch=s.pop();

rev[k++]=ch;

}

rev[k]='\0';

cout<<"Reversed String Is:"<<rev<<endl;

for(int i=0;str[i]!='\0';i++)

{

if(str[i]==rev[i])

{

flag=1;

}

else

{

flag=0;

}

}

if (flag==1)

{

cout<<"String Is Palindrome"<<endl;

}

else

cout<<"String Is Not Palindrome"<<endl;

}