Paliindrome

#include<iostream>

#include<string.h>

#define max 50

using namespace std;

class stack

{

private:

char d[max];

int top;

public:

stack()

{

top=-1;

}

void push(char);

void reverse();

void convert(char[]);

void palindrome();

};

void stack::push(char f)

{

top++;

d[top] = f;

d[top+1]='\0';

cout<<endl<<f<<" is pushed on stack ...";

}

void stack::reverse()

{

char str[max];

cout<<"\n\nReverse string is : ";

for(int i=top,j=0; i>=0; i--,j++)

{

cout<<d[i];

str[j]=d[i];

}

cout<<endl;

}

void stack::convert(char str[])

{

int j,k,len = strlen(str);

for(j=0, k=0; j<len; j++)

{

if( ( (int)str[j] >= 97 && (int)str[j] <=122 ) || ( (int)str[j] >= 65 && (int)str[j] <=90 ))

{

if( (int)str[j] <=90 )

{

str[k] = (char)( (int)str[j] + 32 );

}else

{

str[k] = str[j];

}

k++;

}

}

str[k]='\0';

cout<<endl<<"Converted String : "<<str<<"\n";

}

void stack::palindrome()

{

char str[max];

int i,j;

for(i=top,j=0; i>=0; i--,j++)

{

str[j]=d[i];

}

str[j]='\0';

if(strcmp(str,d) == 0)

cout<<"\n\nString is palindrome...";

else

cout<<"\n\nString is not palindrome...";

}

int main()

{

stack s;

char str[max];

int i=0;

cout<<"\nEnter string to be reversed and check is it palindrome or not : \n\n";

cin.getline(str , 50);

s.convert(str);

while(str[i] != '\0')

{

s.push(str[i]);

i++;

}

s.palindrome();

s.reverse();

}