Reverse string using Stack

**ALGORITHM**

**Input**: Read a string

**Output**: Reverse of string

**Steps**:

Define max=100

Declare integer top

**push**(char x)

1. Start
2. if(top==max-1)
3. print "Overflow"
4. else
5. stack[++top]=x
6. Stop

**pop**( )

1. Start
2. Print stack[top--]
3. Stop

**main**( )

1. Start
2. Declare int variables i & l
3. Declare char array str
4. print "Enter a string: "
5. Read str
6. l=strlen(str)
7. for(i=0;i<l;i++)
8. push(str[i])
9. print "Reversed string: "
10. for(i=0;i<l;i++)
11. pop( )
12. Stop

**PROGRAM**

#include <stdio.h>

#include <string.h>

#define max 100

int top,stack[max];

void push(char x)

{

if(top==max-1)

printf("Overflow");

else

stack[++top]=x;

}

void pop()

{

printf("%c",stack[top--]);

}

void main()

{

int i,l;

char str[100];

printf("Enter a string: ");

scanf("%s",str);

l=strlen(str);

for(i=0;i<l;i++)

push(str[i]);

printf("Reversed string: ");

for(i=0;i<l;i++)

pop();

}