**TITLE 35**

Write a C program to reverse a string using STACK

**OBJECTIVE:**

By the end of this problem we will be able to reverse a string using STACK.

**PROBLEM STATEMENT:**

In this problem we use STACK to reverse a string.

The output is printed once the program runs without any errors.

**ALGORITHM:**

START

Define variables: top

INPUT: Read from the keyboard

COMPUTATION: Computing the reverse of a string using STACK

DISPLAY: Displaying the reverse of the string

STOP

**PROGRAM:**

#include <stdio.h>

#include <string.h>

#define max 100

int top,stack[max];

void push(char x){

// Push(Inserting Element in stack) operation

if(top == max-1){

printf("stack overflow");

} else {

stack[++top]=x;

}

}

void pop(){

// Pop (Removing element from stack)

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

}

main()

{

char str[]="sri lanka";

int len = strlen(str);

int i;

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

push(str[i]);

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

pop();

}

**CONCLUSION:**

The simulation of the above C program helped me learn how the concept of STACK can be used for the reversal of a string.

**OUTPUT:**

aknal irs