1. Given a string, reverse it using STACK. For example “DataStructure” should be output as “erutcurtSataD.”

#include<iostream>

#include<cstring>

using namespace std;

#define MAX 100

char stackArr[MAX];

int top = -1;

bool isEmpty() {

return (top == -1);

}

bool isFull() {

return (top == MAX-1);

}

void push(char x) {

if(isFull()) {

cout<<"Stack Overflow! Cannot push"<<endl;

}

else {

stackArr[++top] = x;

}

}

char pop() {

if(isEmpty()) {

cout << "Stack is empty" << endl;

return '\0';

}

else {

return (stackArr[top--]);

}

}

int main() {

char str[MAX];

cout << "Enter string : ";

cin >> str;

for(int i = 0; i < strlen(str); i++) {

push(str[i]);

}

cout << "Reversed string\n";

while(!isEmpty()) {

cout << pop();

}

cout << endl;

return 0;

}

OUTPUT :

