Institute of Computer Technology

B. Tech Computer Science and Engineering

Subject: DS (2CSE302)

MIDSEM - 1

**PRACTICAL-EXAM**

**AIM: - Akshar is working at admin Department of Ganpat University. He wants to create a simple encode for each string by reversing it. For a given string “DataQuiz”, it should be converted to “ziuQataD” (Reverse string). Kindly follow the given scenario and provide appropriate solution to reverse the string in C using stack. Create an empty character stack of maximum size 10 and the perform push and pop operation with element display.**

***SOLUTION***

//header files

#include <stdio.h>

#include <string.h>

#define MAX 10

//global variables

int Top=-1;

int x;

char Yash[MAX];

//push function

void Push(char x)

{

if(Top==MAX-1)

{

printf("\nOverflow...\n");

}

else

{

Top=Top+1;

Yash[Top]=x;

}

}

//pop function

char Pop()

{

if(Top==-1)

{

printf("\nStack is Empty...\n");

}

else

{

x=Yash[Top];

Top=Top-1;

}

return x;

}

//main code

int main()

{

char Yash[MAX];

int i;

//user input

printf("\nEnter the string: ");

scanf("%s",Yash);

//pushing string

for(i=0;i<strlen(Yash);i++)

{

Push(Yash[i]);

}

//poping string

for(i=0;i<strlen(Yash);i++)

{

Yash[i]=Pop();

}

printf("Reversed String is: %s\n\n",Yash);

return 0;

}

***OUTPUT***

