**Mechi Multiple Campus**

(Tribhuvan University)

Bhadrapur, Jhapa



**Lab Report of**

**Data Structures and Algorithm (CACS-201)**

**Implementation of STACK**

Faculty of Humanities & Social Sciences

Tribhuvan University

Kritipur, Nepal

**Submitted By**

**Name:** Santosh Bhandari

**Roll No:** 58

**Submitted To**

Mechi Multiple Campus

Department of Bachelor in Computer Application

Bhadrapur, Jhapa, Nepal

**Program Code**

#include<stdio.h>

void push();

void pop();

void display();

int stack[3],max=3,tos=-1;

void main(){

top:

printf("\n\n\*\*\*Option\*\*\*\n1. PUSH Data onto Stack\n2. POP Data from Stack\n3. Display the Data of Stack\n\nEnter Your Option(1,2,3): ");

int n;

scanf("%d",&n);

switch(n){

case 1:

push();

goto top;

case 2:

pop();

goto top;

case 3:

display();

goto top;

default:

break;

}

}

void push(){

if(tos==(max-1))

printf("OVERFLOW");

else{

tos++;

printf("Enter the Number: ");

scanf("%d",&stack[tos]);

printf("%d is PUSH to Stack.",stack[tos]);

}

}

void pop(){

if(tos==-1)

printf("UNDERFLOW");

else{

printf("%d is POP from Stack.",stack[tos]);

tos--;

}

}

void display(){

if(tos==-1)

printf("Stack is Empty.");

else{

int i;

printf("Data on Stack: ");

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

printf("\t%d",stack[i]);

}

}

**Output of the Program**



