**Exp: Array Implementation Of Stack**

#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

#define size 5

struct stack {

int s[size];

int top; }st;

int stfull() {

if(st.top>=size-1)

return 1;

else

return 0; }

void push(int item) {

st.top++;

st.s[st.top]=item; }

int stempty() {

if(st.top==-1)

return 1;

else

return 0; }

int pop() {

int item;

item=st.s[st.top];

st.top--;

return (item); }

void display() {

int i;

if(stempty())

printf("\nStack is empty");

else {

for(i=st.top;i>=0;i--)

printf("\n%d",st.s[i]); } }

void main() {

int item,choice;

st.top=-1;

clrscr();

printf("\*\*\*\*Array Implementation Of Stack\*\*\*\*");

do {

printf("\n1.Push 2.Pop 3.Display 4.Exit");

printf("\nEnter your choice:");

scanf("%d",&choice);

switch (choice) {

case 1:

printf("\nEnter the item to be pushed:");

scanf("%d",&item);

if(stfull())

printf("\nStack is full!");

else

push(item);

break;

case 2:

if(stempty())

printf("Stack Empty!Underflow!!");

else

item=pop();

printf("\nThe popped element is %d",item);

break;

case 3:

display();

break;

case 4:

exit(0); } }while(choice<5);

getch(); }