**Stack Program using Static Arrays**

#include<stdio.h>

#define sz 5

void main()

{

int s[sz], top = -1, item, ch;

clrscr();

for(;;)

{

printf(" Enter 1:Insert 2: delete 3: Display 4:exit \n");

scanf("%d",&ch);

switch(ch)

{

case 1: printf("Enter the Item to be Inserted \n");

scanf("%d",&item);

push(s,&top,item);

break;

case 2: pop(s,&top);

break;

**// Function to Display**

display(int s[sz], int top)

{

int i;

if (top == -1)

printf(" Stack is Empty, Display not Possible \n");

else

{

printf(" The content of Stack are \n");

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

printf("s[%d] ===>> %d\n",i,s[i]);

}

}

case 3: display(s,top);

break;

default: exit(0);

}

}

}

**// Function to Push**

push(int s[sz], int \*top, int item)

{

if (\*top == sz-1)

printf(" Stack Overflow, Insertion not Possible \n");

else

{

\*top = \*top + 1;

s[\*top] = item;

}

}

**// Function to Pop**

pop(int s[sz], int \*top)

{

if (\*top == -1)

printf(" Stack Underflow, deletion not Possible \n");

else

{

printf(" Item deleted is %d \n", s[\*top]);

\*top = \*top - 1;

}

}