**Program:-**

#include<stdio.h>

int i=0,top,temp,array[5];

void push();

void pop();

void display();

void main()

{

int ch;

while(1) //infinite loop, will end when choice will be 4

{

printf("\n\*\*\* Stack Menu \*\*\*");

printf("\n\n1.Push 2.pop 3.Display  4.peek 5.Exit");

printf("\n\nEnter your choice(1-5):");

scanf("%d",&ch);

switch(ch)

{

case 1: push();

break;

case 2:pop();

break;

case 3: display();

break;

case 4:peek();

break;

case 5: exit(0);

default: printf("\nWrong Choice!!");

}

}

}

void push()

{

    if(top==4)

        printf("overflow");

    else

    {

        printf("enter data to insert");

        scanf("%d",&temp);

        top++;

        array[top]=temp;

        printf("inserted");

    }

}

void pop()

{

    if(top==-1)

        printf("stack is empty");

    else

    {

        top=top-1;

        printf("element is deleted");

    }

}

void display()

{

if(top==-1)

{

printf("\nStack is empty!!");

}

else

{

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

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

{

printf("%d\n",array[i]);

}

}

}

void peek()

{

    if(top==-1)

        printf("stack is empty");

    else

    {

        printf("element is %d",array[top]);

    }

}