**Program**

#include<stdio.h>

#include<conio.h>

#define max 10

int stack[max],top=-1;

int push();

int pop();

int peek();

int display();

void main(void)

{

int ch;

clrscr();

do

{

printf("\n \*\*\*\*\*MAIN MENU\*\*\*\*\*");

printf("\n 1.PUSH");

printf("\n 2.POP");

printf("\n 3.PEEK");

printf("\n 4.DISPLAY");

printf("\n 3.EXIT");

printf("\n enter your option:");

scanf("%d",&ch);

switch(ch)

{

case 1:

push();

break;

case 2:

pop();

break;

case 3:

peek();

break;

case 4:

display();

break;

}

}

while(ch!=5);

}

int push()

{

int item;

if(top==max-1)

{

printf("OVERFLOW");

}

else

{

printf("enter the element to push:");

scanf("%d",&item);

top=top+1;

stack[top]=item;

}

return 0;

}

int pop()

{

int val;

if(top==-1)

{

printf("UNERFLOW");

}

else

{

val=stack[top];

top=top+1;

printf("popped element is %d",val);

}

return 0;

}

int peek()

{

if(top==-1)

printf("STACK IS EMPTY");

else

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

return 0;

}

int display()

{

int i;

if(top==-1)

printf("STACK IS EMPTY");

else

{

printf("\*\*\*STACK\*\*\*\n");

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

{

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

}

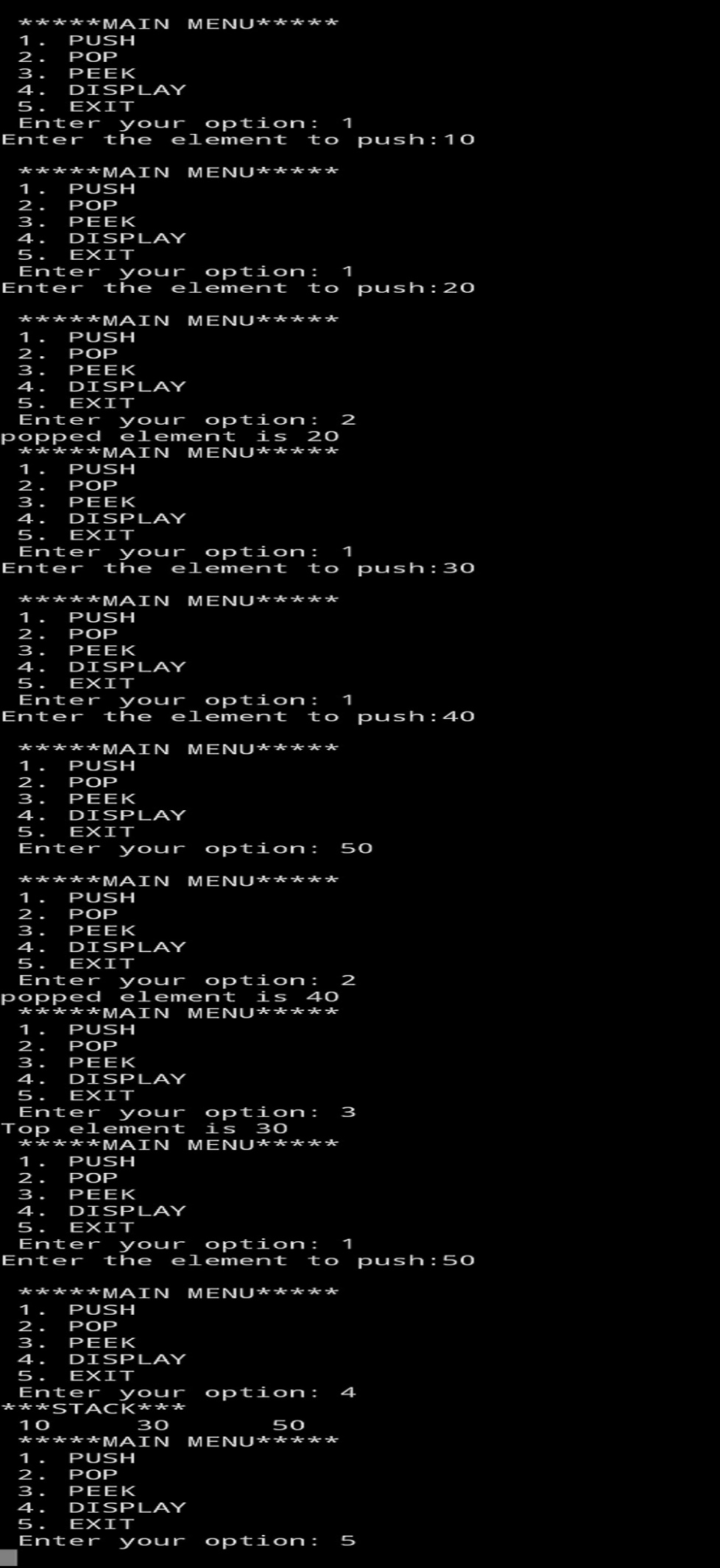
return 0;

}

getch();

}

**Output**

****