```
Prog-5
write a progoum to implement stack
# include 25tdio.n>
#define MAX 10
in stack IMAXT, top = -1;
 void Push Cint Stack EJ, int vai);
 int pop (int stack []);
 int Peep (ind stack []);
  void display (in stack CJ);
  int movines
   int choice, val i
     Clascacoi
    While (17
  Printf (" In MAIN MENU");
  Print (" In Push ");
  Printf ("In Pop");
Printf ("In Peep");
  Printf(" In peep");
   Printf ( " In Exit");
   Pointf("In Enter (noice.");
  Scanf ("-1.d", & choice),
   Swych (Choice)
            Pash (Stack, val);
 Case 1:
                break;
```

```
casea: pop ( spack);
         break;
case 3: display (stack);
          breaki
case 4: Peep (Stock);
case 5: exit(1),
333
 void Dush lint spack [], int vai)
  2 if (fOP == MAX-1))
  E printf (" In stack overflow");
  3 Paintfl "In enter the element to be Dushed on to the
  Stack ")1
   Scanf C "-1-d", gval);
    tOD++;
   Stack Etopj = val;
  int POPL)
   3 int val
   if (+OP = = -1)
   E print of ( " stack is empty ");
     geturn -1;
  else
 & Paint ( a element popped from Stack: tel", Stack (top)
```

geturn val; 33 void displayes gint is if (+0P = = -1) paintfl" no element in stacks; Eprint (" In Element in Stack: (n"); for ( i= +OP; i >= 0; i--) Panth (" In -1: cl", Stack[i]); 33 ins peep (ins stacker) 4 if (fOP = = -1) ¿ print & (" In Stack is empty "). detasu -1; Printf ( " In the value fored on the top of the 3 else 3 Stack is: -1.d", Stack[tops); yeswan (Stack[toP]); 3

```
001 009
MAIN MENO
  push
  POP
  Display
    Deep
ender the element to be pushed on to she stack: 3
 MAIN MENU
    push
    POP
    Display
     Peep
     Exit
   Enria your choice: 3
    element in stack: 3
    MAINMENO
      push
       POP
       Display
         Deep
          Exit
    liver your choice: 4
   the value stored on the for of the stack 15:3
        MAIN MENU
           Push
```

pop

display

peep

exit

enter your choire: a

element popped from stuck: 3

element popped from stuck: 3

pop

clisplay

peep

exit

enter your choire: 5

```
File
         Edit
                Search
                         Run
                              Compile Debug Project
                                                       Options
                                                                   Window
                                                                           Help
                            \TURBOC3\DHANYA\STACK.C =
                                                                          -1=[‡]-
#include<stdio.h>
#include<comio.h>
int stack[MAX],top=-1;
void push(int stack[],int val);
int pop(int stack[]);
int peep(int stack[]);
void display(int stack[1);
int main()
int choice, val;
clrscr();
while(1)
printf("\n Main MENU");
printf("\n Push");
printf("\n Display");
printf("\n peep");
printf("\n Exit");
printf("\n Enter your choice:"):
scanf ("xd", &choice);
switch (choice)
      - 1:1 -----<del>-</del>
                                           F9 Make
                                                    F10 Menu
F1 Help F2 Save F3 Open
                            Alt-F9 Compile
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File
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                            NTURBOC3NDHANYANSTACK.C
                                                                           1=[#]
switch (choice)
case 1: push(stack,val);
         break:
case 2: pop(stack);
         break:
case 3: display(stack);
         break:
case 4: peep(stack);
        break:
case 5: exit(1);
void push(int stack[],int val)
if (top==(MAX-1))
printf("\n stack overflow");
<u>e</u>lse
       41:1 =
         FZ Save F3 Open
                                            F9 Make
                            Alt-F9 Compile
                                                      F10 Menu
F1 Help
```

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File
          Edit
                Search
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                             Compile
                                     Debug Project Options
                                                                 Window
                                                                         Help
                           \TURBOC3\DHANYA\STACK.C =
                                                                         :1=[‡]:
else
printf("\n enter the element to be pushed on to the stack");
scanf("xd",&val);
top++;
stack[top] = val;
int pop()
int wal;
if (top==-1)
printf("stack is empty");
return -1;
else
printf("element pupped from stack:xd",stack[top]);
top--;
return val:
     = 45:77 ----
                                          F9 Make
                                                    F10 Menu
F1 Help F2 Save F3 Open Alt-F9 Compile
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File
          Edit
                Search
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                             Compile
                                     Debug Project
                                                      Options
                                                                 Window
                                                                         Help
                           \TURBOC3\DHANYA\STACK.C =
                                                                         1=[#]
void display()
int i:
if (top==-1)
printf("no element in stack");
else
printf("\n element in stack:\n");
for(i=top;i>=0;i--)
printf("\n \nd"stack[i]);
int peep(int stack[])
if (top==-1)
printf("\n stack is empty");
return -1;
     = 82:77 ---
F1 Help F2 Save F3 Open Alt-F9 Compile
                                           F9 Make
                                                    F10 Menu
```

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File
          Edit
                Search
                       Run
                             Compile
                                     Debug Project
                                                      Options
                                                                 Window
                                                                         Help
                           \TURBOC3\DHANYA\STACK.C
                                                                        :1=[‡]:
if (top==-1)
printf("no element in stack");
else
printf("\n element in stack:\n");
for(i=top;i>=0;i--)
printf("\n 2d"stack[i]);
int peep(int stack[])
if (top==-1)
printf("\n stack is empty");
return -1;
else
printf("\n the value stored on the top of the stack is:xd",stack[top]);
return (stack[top]);
      87:77
                          Alt-F9 Compile
                                          F9 Make
                                                    F10 Menu
F1 Help F2 Save F3 Open
```

```
MAIN MENU
Push
 pop
Display
peep
Exit
Enter your choice: 4
the value stored on the top of the stack is:3
MAIN MENU
Push
pop
Display
peep
Exit
Enter your choice: 2
element popped from stack:3
```