untite a program to implement stack using linked list? Hinclude Lydions #Include / lonio.ns #include 25+dlib.n> Struct stack int clerty; Straut Stack & next; * top = NULL, +temp; int main() int Li Clasta (); while (1) print (" In main munu"); printf (In 1. Pushin), brint (" In 2. Pop "); Printf (u/n 3. Display "). Printf ("In4. exit "); Printf (" In enter - the choice"), "Scanf (" \n - 1 · d", & c); Switch (c)

breaki € case 1: Push(); case 2: POPC); preak! case 3: displayes; breaki case 4: exit (1) break! default: Printf ("wrong"); Push() 3 stouch Stack * tempi int Item; + empl struct stock + man oc (Size of (8+ouch Stack Di Printf ("In inster insert element on to the Stack "); scanf ("+d", & i+em); femp -) datas item; temp -> aext = 100 top = tempi

detuon; Estouet stuck x Pto) if CHOP == NULL) Print (" stack i's empty"); else 3 temps topi Paintf (" In Popped 1'tem is tod In: ", temp adata), top = top -> next; free (temp); deturn; display () . E jarrect Stack & Pts, Pto=ton; if CFOP = = NULL) EDVINAGO "STACK 13 EMPHY"), E printf (" stack elements are: (n"); ownile (Dto ! = NULL); E print (" dd In", Ptr -> data). Pto = Dos > next, 33 " descent"

OUTPUT

main meny

1. Push

Q. POP

3. display

4. Roit

loses choice: 1

insert element on to the stack

3

main meny

1. Rush

2- POP

3. display

4. exit

enter choice: 3

Stack elements are:

3

Main menu

1. Push

5. bob

3. display

4- 001+

Popped item is 3

CO NIX 3 :

```
File
          Edit
                Search
                         Run
                              Compile
                                      Debug
                                              Pro ject
                                                       Options
                                                                   Window
                                                                           Help
                           \TURBOC3\DHANYA\STACKLIN.C
                                                                          Z=[$]:
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
struct stack
int data:
struct stack *next;
*top=NULL, *temp;
int main()
int c:
clrscr():
while(1)
printf("\nMain Menu\n");
printf("\n1.Push\n");
printf("\n2.Pop\n");
printf("\n3.Display\n");
printf("\n4.exit\n");
printf("\n enter the choice");
      - 1:1 ----
                         Alt-F7 Prev Msg
         Alt-F8 Next Msg
                                            Alt-F9 Compile
                                                            F9 Make
                                                                      F10 Menu
F1 Help
```

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File
        Edit
                Search
                        Run
                           Compile Debug Project
                                                      Options
                                                                 Window
                                                                         Help
                          \TURBOC3\DHANYA\STACKLIN.C =
                                                                        2=[‡]
scanf ("xd",&c);
switch(c)
case 1: push();
       break:
case 2: pop();
       break:
case 3: display();
        break:
case 4: exit(1);
        break:
default :printf("urong");
push()
struct stack *temp;
int item:
temp=(struct stack*)malloc(sizeof(struct stack));
printf("\n insert element on to the stack");
      42:1 ===
       Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile
                                                           F9 Make
                                                                    F10 Menu
F1 Help
```

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File
         Edit
                Search
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                             Compile
                                     Debug Project
                                                      Options
                                                                 Window
                                                                         Help
                          \TURBOC3\DHANYA\STACKLIN.C
                                                                        2=[$]
scanf ("zd", &item);
temp->data=item;
temp->next=top;
top=item;
return;
pop()
struct stack *ptr;
if(top==NULL)
printf("stack is empty");
else
temp=top;
printf("\n popped item is %d \n:",temp->data);
top=top->next;
free(temp);
return;
<u>d</u>isplay()
      63:1
                         Alt-F7 Prev Msg
       Alt-F8 Next Msg
                                          Alt-F9 Compile
F1 Help
                                                           F9 Make
                                                                    F10 Menu
```

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File
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                             Compile
                                     Debug
                                            Pro ject
                                                      Options
                                                                 Window
                                                                         Help
                          \TURBOC3\DHANYA\STACKLIN.C
                                                                        2=[‡]:
displayO
int i;
struct stack *ptr;
ptr=top;
if (top==NULL)
printf("stack is empty");
else
printf("stack elements are:\n");
while(ptr!=NULL)
printf("xd\n ",ptr->data);
ptr=ptr->next;
return:
     = 82:1 ----
                         Alt-F7 Prev Msg
        Alt-F8 Next Msg
                                          Alt-F9 Compile
F1 Help
                                                           F9 Make
                                                                    F10 Menu
```