```
Program no: 8
 Program to implement queue asing linked list
Program
 # forlade stdio. h)
# Enclarle & Conto. hs
# Include < stdlib. hs
Struct node
 Ent the Ente;
 struct node Altou;
 # = NULL , * N = NULL;
 Ent mains
  fort c;
 Clasen Co;
 while (1)
  pmintf("In main menu");
  posnite (" In 1. Insert ");
  porent ("Ind. de lete");
 porent ( uln3. desplay ")
 pontolit "In 4. Quet ");
```

```
print(" In order the choice");
   Scant ( " % d", &c);
   Switch cos
   case 1: publi;
      break
  case 2: popos;
        break;
  case 3! display ();
        break;
  case 4: enst as;
        break;
  default prients (" wrong ");
3
pubc)
  struct much # t;
   Ent item;
   t= (strait node x) mallec (size of (strait node ));
   print ("In Emart the olement");
   scanf ("1/1d", & item);
```

t-) Into = Ptem; t -> link = NULLY if (= = NULL) f=t; else ~- slok = t; N=t; return; color the chares 3 West the element popes Struet node *t; latel. if Cf = = NULL) prolott ("Inqueae empty"); else west in chalie t= 1; prosont ("Indelete the "od element", t-> Ento); f=f-)lenk; free (t); return,

```
display ()
 stract node Aptv;
ptv = f;
if Cf = = NULL)
porénts ("In queae is empty");
else
pouloté ("que element ave: \n");
while (ptv! = NULL)
prentl("ydln", ptv -> Pobo);
ptv = ptv _ , link;
portet " sod in", ptr - so into);
ptr = ptr-> Un4;
poulatt ("In");
redurn;
```

(310H = 402) (-) output Charle Mans MAIN MENU 1. Insert 2. delete 3. desplay 4. Quit entar the choice 1 Ensert the elements MAIN MENU 1. Insert Fr Spar 250 d. delete CTUAL ==+ 3. display. as surepolar of testar 4. quit enter su choice 3 queue element ave: MAIN MENU 1. Insuf 2. Delete 3 display

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-[:]-
                          NTURBOC3NSARANYANQUEUEL IN . C
                                                                           -2=[$]
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
struct node
int info;
struct node *link:
*f=NULL, *r=NULL;
int main()
int c:
clrscr();
while(1)
printf("\nHAIN MENU");
printf("\n1.Insert");
printf("\nZ.delete");
printf("\n3.display");
printf("\n4.Quit");
printf("\n enter the choice");
        1:1 ----
```

```
NTURBOC3NSARANYANQUEUELIN.C
                                                                         =2=[$
printf("\n enter the choice");
scanf ("zd",&c);
switch(c)
case 1: push();
         break:
case 2: pop();
         break:
case 3: display();
        break;
case 4: exit(1);
        break;
default: printf("wrong");
push()
struct node* t:
int item;
t=(struct node*)malloc(sizeof(struct node));
       26:68 —
```

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-[1]-
                       — \TURBOC3\SARANYA\QUEUELIN.C =
                                                                           -2=[$]:
printf("\n insert the element");
scanf("zd",&item);
t->info=item;
t->link=NULL;
if (f ==NULL)
f=t;
else
r->link=t;
r=t;
return;
pop()
struct node *t;
if (f == NULL)
printf("\nqueue empty");
else
t=f:
printf("\ndelete the %d element ",t->info);
f=f->link;
——— 44:62 ————
```

```
NTURBOC3NSARANYANQUEUEL IN . C
                                                                          -2=[$]
free(t);
return;
display()
struct node *ptr;
ptr=f:
if (f == NULL)
printf("\n queue is empty");
else
printf("queue element are:\n");
while(ptr!=NULL)
printf("xd\n",ptr->info);
ptr=ptr->link;
printf("\n");
       68:68 —
```

```
NTURBOC3NSARANYANQUEUELIN.C
                                                                           -2=[$]
display()
struct node *ptr;
ptr=f:
if (f == NULL)
printf("\n queue is empty");
else
printf("queue element are:\n");
while(ptr!=NULL)
printf("%d\n",ptr->info);
ptr=ptr->link;
printf("\n");
return;
       86:68
```

MAIN MENU

- 1. Insert
- 2.delete
- 3.display
- 4.Quit

enter the choice 1

insert the element 5

MAIN MENU

- 1. Insert
- 2.delete
- 3.display
- 4.Quit

enter the choice 3

queue element are:

5

MAIN MENU

- 1.Insert
- 2.delete
- 3.display
- 4.Quit

enter the choice