LAB-5 Linear Queue Implement ation. WAP to simulate the working of a queue of inter-using an array. Provide the following operation a) Insert 6) Delete (3) Dirplay The program should frint appropriate menages for quen empty and queue overflow conditions. #include extelio-h7 # include 2 stollib. h7 # define MAX 5 and fromt = 0; int rear z-1; int queue [MAX]; void Enquer (int); int Deque (); boid display(); int main () int option; ant item 1

```
do
    feintfe ("In 1. Annet to duene (En law)");
     fritt [" m 2. delete from the duem (Delum));
     printf [" n 3. Dishbay the content.");
    printf (" | m h. Exit \m");
    pents ("Enter the option: ");
     scant ("/d", & oftion);
     switch (oftion)
         core 1: print f ("Enter the elements \m");
                   sauf ("-1-d, Liteur);
                   Engre ( items);
                   break;
          cose 2: item = Deque();
                   if ( item = -1)
                   faintfl" Ruene is confity \");
                    printf!" Removed element from the
                             queue 1 d", item);
                     break'
            ease 3: disfloy (9)
                      break;
             eare 4: exit(0);
  y while (option! = 4); return 0; 3
```

```
void Enque (int de)
  if (sear == MAX-1)
    fraitfl'' Queue is full m');
      near ++;
      queue [real] - ele;
  Degue ()
 int éters :
 if (front==-1)
   return -1;
    item = queue [ front];
     front +1;
    if I front > read)
       front = -1;
      return item.
```

```
display ()
   4 (pont == -1)
    paintfol" Queue is empty. In');
      print f ("In due constents: ");
      for (i = front; i <= red; i+)
         feitf ("1.d", quare [i]);
expected output.
                    (would be deven (Enduces)
1. I west to duene (Enqueue)
2. delete from the durene (De Russe)
3. Display the content
Enter the options: 1
Enter the element.
1. Inset to Queue (En Queue)
2. delete from the firme [ De lucue).
3. Dirplay the content
4 - Exat
Enter the option: 1
```

Enter the element 1. Danset to Duene (Endreue) 2 delete from the dueue (De dueue) 3. Diploy the content Enter the option: 3. due contents: 12 1. Insert to dum (Endum) 2. delete from the Queue (De Luciu). 3 - Display the content 4. Exit. Enter tu oftion; 2 Removed element from the due 1. Auset to dueue (En Jueue) 2. stelete from the Queux (De Queux) 3. display the content

Removed element from the fue 2 1. Invest to duese (Endneu) 2. delete from the dueu (De dueue) 3. Display the content 4 - Exit Enter the oftion:2 Dueuis Empty 1. Insert to dueue (Endueue) 2. delete from the Sueur (De Sueur) 3. Display the content 4. Event Enter the oftians.