```
LAB-4;
 : Double Ended Queue:
 #include < Stdio. h>
 # include < Comio. h>
  # define 98ize 5
  int. f=0, r=-1, eh;
   int item, q [10];
   int isfull ()
                      (+) (+=1,121921) H
  return ( 7== qsize+1)? 1:0; 3
    int isempty ()
{ return (f>r)?1:00;34.
     void insert rear ()
      ¿ if (isful()) 2
               printf ("Queue overflow/n");
               return;) 130# + +19811
       カニタナー
 (12) H 9[8] 2 Hem; 3 13
              4) 20 (0 = 21) 11
 void delete front ()
if (isempty ()
pointf ("que ue empty m");

retuen; 3

pointf ("ifem deleted is 1-d |n")

q [(f)+1];
       if (f>x)
             3 f20; 821; 3.
```

```
void insert_tront()
     if (f!=0)
      & f=f-1; q[f]= item; return;}
      else if ((f=0) 40 (r==-1))
        { q[++(r)]= item, return; }
      else
           print f ( " inserteon not possible \n");
void deleterear ()
     if (isempty ())
           printf ("Quede is empty \n");
   printf ("item deleted is 1/d \n", q[(r)--]);
if (f>r)
       f=0; r==1;3+1011 bov
                   (()111121)41
 Void insert_front()
      2 · f = f-1; 9 [f] = item; netuen; }
      else if ((f==0) NA (7==-1))
           QETECTI JEILEM; returnigo
          { q[++(r)] = item; return; }
      -else
            printf ("insertion not possible in) 3
Void delete_rear()
     if (isempty())
            print f ("Queue is empty \n");
             return; 3
```

```
print f ("item deleted is 1-d lm"

q (6) -- 1);

if (f>x)

q f=0; x=-1; }
 void main()
for(;;)

2 printf ("1.insertirear from
                   LOCALDINE > South
                2. insert_front m
                3. delete_rear m
1000 4. delete front In
               5. display m
                   6. exit(n");
 print f (" enter choice m");
Scanf (" 1d", pch);
Switch (ch)
     case!: printf ("enter the item (n");
         scamf ("1.d", pitem);
      break; (all tomb)
       case2: printf ("enter the item lm");
           Scanf ("1.d", & item);
in seit_front(); the but
               break;
        Case 3: delete_rear ();
          case 4; delete-front();
break;
           Case 5; display ();
                    break;
```

