```
Periority Queue:
Holefine max 5
int q/[max], front = -1, rear = -1;
void insertion ()
d
   int el;
               [brand] W = X
   if (sear == mad-1)
     prints (" full"); tal
   else
     print + (" enter element");
      scanf(" 1.d", fel);
       if ( front = = -1) ( ) polyte 510
          front = rear = 0;
          average el,
                "6. 1. ") Italies
         for (i=grant; i<=rear; i++)
             if (arti) > el
               break;
          bor (j= near; j>=i; j--)
               Q[+1] = Q[];
          rear ++;
```

void deletion () int Killer in the state of the if near = m if (front == -1) point (" empty"); ele K= q/Efront]; Grant total - trans Dreme point ( deleted element is K= Or [front], if (Grent = = rear) front = rear = -1; front ++; printf(" deleted element is "/d", N; world " v.d", tell, void display() (1-== tray) f front = sease = 0; for (i= front), i== near / i++) printf(" Y.d", arcis), maine secret is trusted is let while (i) clo & [i] p ) di printfly enter 1 to insert 2 to delete 3 ito display u to enit"); 'scant (41/d", 1 ch);

switch(ch) as donel . 1 500. insertion (); break, deletion (); break; care 2; display (); break; Care 3: can u; enit (0) Ceris == stones "(" that ") string

ix < object fit o > dienal life

#define size 5 int 1 (med), length =0; CHO SHORTING void insertion () int indixs, el;
point fle enter index"); scanf (1 1, d", + index); if (length == size) printel" full"); else if ( length > 2). else if (index <0 ## index 7 langth) printf(" insertion not possible"); else painte (" enter element"); sean + (" '/.d", 4 el); bot (i = length-1; i >= index; i--) ippost JCi+J = JCiJ; Length ++; 12/ 56 4 leigh 450 1>0

void deletion ()
intindex; printfly enter index"); scanfly 1.d", linder, if ( & lungth = =0) printel " empty"); else if (index <0 } index 7= length) printel" not possible"); for (i=index; i = length-1; i++) Chang print 1 to date ted to by a little JCi)=JEi+i]; point of u enter indust); pointfly deleted element is ",d", I [inden]); for (i = index; i < elength, i++) LCiJ=LCi+J; y length -- ; void display () the betail print+(4 %d ", LEi);

not index; positive entres index d int ch; ( ) Lungth = = 0) while (1) purtl(" empty") d printf ("enter 1 to insert 2 to delete (April = meoris to display "4 to exit"); scantly y, d", tch); but " the witch (ch) case 2: deletion (); break; case 3: display (); break; case 4: Tentt(0); [] point I (" entry I religion !!) uning winted list: the circler i ic slangth, it | 1000 | 2000 | 3000 | 3000 | 5 | 2000 | 5 | 2000 | 3 | NULL | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10 500 ( ) yelally () Linked List! It is logical linear data structure Mintf (1 1/4 " I Lis)

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(self referential staucture).
   extruct rode
    int ipointo;
                           i got - and
   Houset node * ptr;
 typedet stouct node node;
node * top = NULL , *temp, * new node;
void push ()
d int eles
  prints (4 enter element");
   scan+ (" ", d", fele);
  new node = (node *) malloc (size of (node)),
   newrode -> info = ele,
    newnode -> pto = top;
     top = newrode;
                         (with (chi)
void pop ()
         Cold 1: publ 1: beeak !
   if (top selvull) god is you
   point (" empty");
  else
      K = top - info;
      top = top -) ptor;
     print4(" deleted element is "/,d", k),
```

```
void duplay ()
                               Sour truck
   temp = top;
while (stemp | = NULL)
                            comment to
    pointfly y.d.", temp -) info);

temp = temp; -) ptoris,
                                  () Alleg Ma
main ()
                                  int else
d int ch; while (1)
                  ("trende rector ") strive
                     scand (4 1/ 8 " Lele);
                runnade = (node *) mallor
  porinte (" enter i to push 2 to pop

3 to display u to exit");
     scanf(4 1/2 d", 4ch);
     witch (ch)
                                  () gog bler
         care 1: push (); break; it is the
          case 2: pop (); break; and ) !!
         cak 4: enit (0); break;
 y
                      'copii cogoti = >
                     ालंग ६ - पुर्व - पुर्व
   Prints ( deleted dement is 1.d' &).
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queue using linked list! to the law : 130U = renove = troval struct nodo ; reta ( - trans = trust int info; stauct node \*pta, roughly hier node; type det typedet stauct node \* tout - NOIL sta node ? \* front = \* rear = NULL, \* temp void insert () d intel newrode = (node \*) malloc ( riset (node)); printl(" enter element"); its the (scanf(", d", tel); (1) stilled newhode - infor = el; if ( front = = NU.LL) front = great = new node; Ecanpl" 1-0", 40h); else near = near - ptr = new rode, land ( ) for 1000 ( in or of a 2625) Le timo neconode

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that hetril who
 void delete()
    perinte (4 deleted element is ",d" K).
    if ( ever front = z rear)
                                        100
           front = rear = NULL;
                                        san.
    else front = front -> ptr;
                                  about town.
 void display ()
     demp = front = ; was to work
     while (temp! = NULL)
      printf("/d", temp-) into);

temp = temp -) plar;
void maine ( ) maller ( + ) maller ( )
  int ch; Chamels rates "19thing while (1)
    pointfly enter 1 to insert 2 to delete
           3 to display 4 to exit"),
      scanf(" 1/2 d", 4ch);
       witch (ch) There a person
         case 1: Inserte ); break; case 2: delete (); break; case 3: display(); break; case 4: enit(o);
3 3
```

Double ended queue; 1/ Ctrans 1 (Rizers 4 trans) 1 il-=rear = trang Grent = (frent + 1) 1. man (d, 1, 9) string

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Hinclude < Hdio. K7
 i'nt or (maxi), front = -1, rear = -1;
void inserted ()
  , int el,
   if (front == 0 f4 hear == max -1)
    print+(" full"),"
   elye
            "I" tremel restre "I'll in
      print+ (" enter element");
       scantl" 1.d", tel),"
       16 ( front = = -1)
          front = mean = 0;
        else if (front >0)
           front --; (1-== to ;)
        else
                   (O = recen = trail
           for (i = rear; i >= front; i--)
           of 1- sight > rease ) if sell
               q( = q( = q) ];
                Success Edgs + records
             near ++;
      ar [front] = elo;
   t+1 (resure =>1 it tourst = 1) Pay
```

でものはかりい void insertal) d max-12 44 front ===0) "(" thot ") 4 tring printf("enter element"); scanfly /, di, del); if (real < max-1) man++; (-== trans) ) 41 a/[rear] = eller = trans (ox tray) j wh if ( front ==-1) ; -- trans (- - y trans = ( ) Rose = 1) Roj else if ( rear < max-1) dress to = [1+10000] rear + f ar [rear] = eli VERNERY JE ele; else for (i=front; i<= rear; i+t) V[peard - 1] = q(trent]; provete es I v[rear] = el; y front -- ,

void delete & ( it ( bront == -1) printf( empty "); elee it ( front = = rear) printfly deleted element is "d", or [front]), of the if ( front == max =1); printf (" deleted element is ", d", a [ bront]); printfl' deleted element is v.d", or (front), detated element is "tot", of Prose!); Scantle 1.6", Lith roid deleter () if (front ===-1) printf(" empty"), ( House ! 1 netern) it (front = = seas) 2 front = suar = - | element is 1, d", Wares) else if Crear of (rear == 0) prints ('deleted element 'b ", d", a (rear); else perint+1' deleted element is 1/d", v(rear), pointer delated demand had d' sussess),

( ) of situation void displaye) int; for (i = front; i <= rear! i+1)

print+(a 1/, d", a/Ci); void main () ( PRODE = = front) } while (i), thends totales returned while (ii), d print + (" enter | " to insent front in 2 to insert from reary is 1 d", of Charles 3 to delete from front in It to detete from rear in 6 to enit "); scanfly v.d", tch), () restilet Switch (ch) (1-==}tray) } case 1; insert fl ); break; case 2; insertar(); break; case 3: deletef(); break! care 4; delete or (7) break! case 5: display(); break! (my can Gi enit Co); (to John "b" A bound by belief " thing the "Wally Like it of the party but