```
Concatenate, port, rouerpe:
 #include < stdio. h>
                      ilder anide the Holder of the ander
 #include < Atdlib. h>
                         City & distinity and thethorn him
  Struct Node
       int data;
                                      16 desta -/ (1) 14/3
                                 - (duction of to) wh
       Struct Node *next;
                                            (. /a0) w
 void append (struct Node* *head_reg, int new-data)
        struct Node* new_node=(struct Node*) malloc(rizing
                             (shuck Node));
   struct Node * last = shied net ;
        new_node_>data = new_data; D
new_node_>next = NULL;
        [[], [-2], [0], [:], [], [], [], [], [], [] ] pie board *) pi
             * head-suj = new_node;
                                                   didle
        while (last -> next != NULL)
              last = last > next;
              3 Te . o. ther, E. llux, there have there
         las t_>rext = new-node;
(abant about trust ) triltrived bior
            while (node != NULL)
                   Print (" 1. d -> , node -> data);
                    node = node -> nex 1;
            pointf("Null\n");
```

NO

```
postist (skeet Node " "head - my)
  if ( there == NULL)
                          houses the death of the
                            Last & Hours to white
       outurn;
                           2223 - I have as I with a
   int swapped, temp;
   skuct Node *phili team Land has
   skuet Node * Ipk = NULL;
   do
      snapped = 0;
                                 - Jaking Lating of
      p. 191 = * . head - 909;
      while (ptil->next!= 1pti)
          ig (p. H1 -> data > p. H1 -> next -> data)
              temp = ptf1 > data;
               px1 ->data = px1 >next > data;
               pk1 -> next->date = demp;
               Swapped = 1; just "elol treven
              pH1=pH1->next;
             1 p.# = p.#1;
                           is and - draw bake
          while (swapped);
 Heid
                       should those and to him
                       were with the think
                                   i suois , is the
```

```
void sænerschist (skuct Node * * head-sey)
      struct Node * prev = NULL;
                                                            P
      skut Node + current = + head rey;
      skurt Node * next = NULL;
     While (current != NULL)
                                for and bony
           next = current_>next;
            current_> next = poew;
            pour = current;
            current = next;
         * head _ geef = prev;
void concatenatelists (struct Node* * head 1, struct Node* head 2)
      if (* head I == NULL)
             * head = head 2;
            - swarn;
            4 spool = Tob = txxx <- ]
      struct Node * temp = * head ];
      while (demp -> next 1= NULL)
             demp = temp > next;
       demp-rext = head 2;
    main ()
      skut Node Plist 1 = NULL;
      Street Node * list 2 = NULL;
      int n, data;
```

```
printf ("Enter the number of elements zer list I:");
 hant ("1d", &n);
 private (" Enter the elements got List I: In");
                                          . Att 1 . Element to
  soi (int i=0; i<n; i++)
                                     - maddolina delina il
        scanf ("id", & data);
                                            Comment with
         appoind ( Plist 1, data );
                                            2049 2144
  positif (" Enter the number of elements for list 2:");
   Kunf ("1d", &n);
   prints (. Enter the elements for List 2: In");
    for (int 1:0; 1=n; 1++)
          Sout (" y. d", & date);
                                       i break about books
          appund (Rlist 2, data);
                                             CHERRY WILL
   print & ( In Original list1: );
                                    is and his
    poundList (list1);
    print & (" Oliginal List 2: ");
                                   (H. Janes Teluk
    printlist (list 2);
    ; (Itila) tilling.
                         country is choose
    willist (klista);
    print("InSoled list I: ") 1. IN/ ) + Long
point ( Sor ted list 2: );
     concatenatilists (slist1, list2);
     printf("In concatenated list: ");
     pseindlist (list 1);
     reverselist (8 list 1);
     printfl' In Rough ed list: ");
     printhist (Dist 1);
     return D;
                                · SLAUTE
```

4

```
hinked List
3) Stack wing
 #include (stdio.n>
 # include < stdlib. h >
 void push ();
 wid popes;
wid display();
 struct mode
      ind val;
      Street node * next;
skul node *head;
                            which is fail a low wife.
wid main ()
                         it I had being is 1) & toins
     int choice = 0;
      printf("In stack operation wing linked list In");
     while (choice ! = 4)
           printf(" In choose one from the below options. In");
           print + ("In I. Puch In 2. pop In 3. Alow In4. exit");
            print f (" In Enter your choice In ");
            sant (" 1.d", believe);
            Switch (choice)
                        Chil , Ikil & Hillandows
               case 1: ( : In below to no 1) / Ling
                                      : (I tail tailbourg
                  puch ( );
                  y break;
               Case 2:
                   pop ();
                  3 break;
```

```
are 3
       display ();
       break;
     Couse 4:
         print f ("Exiting.");
        break;
     dyault:
        printf (" Please enter valid choice");
  ž;
void push ()
   struct node *pte = (struct node *) malloc (size of (structured));
   ig (pt == NULL)
     printf("not able to puth the element");
   de
    print(" Enter the value");
    sconf(" 1.d", b-val);
     y (head == NULL)
          pk->val=valia, w/ is
          pta->next=NULL;
           head = pts;
      elve
         PK-> val = val;
          pt > next = head;
          head = p to;
          + O (" Tlane turbed");
```

°("41

```
void pop()
    int item;
     struct node *pts;
     ig ( head == NULL)
         z pointf(" undergle w");
     else
            item = head->val;
            pt = head;
             head = head -> next;
             free (pt);
            printf(" Item popped ");
 z
 void display()
      struct node * pts;
                           about towns) = 1ty + show
( head;
      y (ple == NULL)
           printf(" stack is empty in");
             print+("Printing stack elements In");
while (pts != NULL)
       else
                  paint (" ./ d In", pte > ral ); = 16
                   pt = ptq = next;
                                            Lave to val
   z
                                         i board = true = 1/11
```

```
3) Queue using Single linked list:
Hinclude (stdio.h) and ) and a warm ( a sent work) and
Hinclude ( stdlib. h >
skuct node
                           de 11 1 wastral 2 Mg ) + Louis
  int data;
  skuct node + next;
skuct node + front;
stact node + rear;
void inset ();
void delete ();
void display();
void main ()
   int choice;
                            CADUAT TRUE LIEU
   While (choice !=4)
      point ? (" In Queue operation using linked list ?");
      point f(" m 1. inent an element in 2. Delete an element
              In 3. Display the queue In. 4. exit In");
      Printf (" In Enter your choice");
      scanf ['/.d", bolice); , son = tresse was
      switch (choice)
         Case 1:
          insert();
          break;
        Tare 2:
           delete ();
            break;
         Care 3!
            display();
           break;
        Case 4:
            cxit(o);
            break;
         9 pounté ["In Enter valid choice n')
       dejault:
```

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C) Happi hiles
                                stand made volts
       VI
                                   Mil Alem! ( or I mallo Criscof Caked A riode ) 500 ( of Caked A riode )
                                  ind Alem)
                                   CHOWS # 49 7 /
                                                       point of (" In Oues flow In");
                                                                                                                                                                                         Come was
                                                         relian's
                                                                                                                                                                                              trail + stant
                                    elig
                                                      podult ("In Enler value In");
                                                       scoul(" " d " , & I tem);
                                                        p.19 -> data = item >
                                                         y ( nont == NULL)
                                                                                front = pt;
                                                                                   sear = pt ;
                                                                                  Kont->next = NULL;
       VI
                                                                                                                                                                              (He / web) while
                                                                                    seed -> next = NULL;
                                                                   (3 lil light prose vederate mas ? HI") Through
((de lundo else 18 12 transle de tour 1 m ) 4 Long
                                                                         real -> next = phy the purple ?
                                                                              reas = pts;
                                                                                  real->next = NULL; would by the
                    void delete ()
                                    struct node *pts;
                                    4 ( pard == NULI)
                                                   point { (" In under flow In");
                                                      return;
                                  else
                                                       pt = front;
                                                      front = front => next;
                                                     free (ptr);
```

```
world display ()
  steut node *pts;
  ple = front;
  ij ( front == NOLL)
      point (" In Empty queue \n");
    du
       point f (" In printing values .. In");
        while (pts ! = NOLD)
            pt printf("In . Id In", pt -> data);
                p#= p# -> rext;
            3
    0 p.
     Open operation wing linked list
         2. delete an element
          3. display the queue
         enter the choice
          enter the value
           enter the choice
            enter the value
             cuter the choice 3
              printing values
              entex choice 2
               enter the hora 3
```