```
#include cstdio. 4>
 #1 relude = std ib. h>
struct rode {
       int date;
       st-auct node*next's
Void inseatAtEnd (Itauch node * * head, int d) {
g.7
   struct node * temp, * n's
   } ( Llow == Noll) {
           temp = (struct node * ) malloc (size of (struct node)
           temp->dota=d')
    ( been p -> next = NULL)
            * head = temp )
     4
     else { little 1 and is book to book t
        temp = * headi
      while ( temp-> rext 1 = NULL) {
          temp = temp ->rext j ? (JJem == 6 book ) 1
     n= (struct node *) melloc (size of (struct node));
     3
                    1 16 ml 4 - 0 - 91 4 of m 1 20 1/2
      n-> deta =d')
       N-S next - NOLL)
      temp->next=n;
 4
 B
void geverse (struct node * thead) {
    Struct node + preu, + cua, * next 1;
    cua = * head 's
    Paeu = NULL'
    vexf 1= NOFF.
```

week.

```
3 CIJON == book #) Fi
         Paint (" Empty List(n"))
         actuan's
 While ( coa) = NULL) {
next 1= cun-> next)
Cug->next= Previl 600
                   in the order of the
 Mev=cua's
Cug = next 1)
 glove to difference) soller ( Your Asold) = 9-00
* head = previ)
Void Concat (struct node ** had 1 struct node ** had 2) {
  i f (* Leod 1 == NOLL) {
          * hood = * hood 2j
          getuan's
                  2 ( JSUM = 1 3xxx 2 - Grant ) stin
     3
    if (* Lead 2 == NOLL) { ( dxx (- 4 - 9) - 4 - 9)
              * head 2 = * head 1;
    Return sollow ( & short forty) = 1
      struct node + temp = * headly
      while L temp-> next & = NULL ) &
      temp = temp - snoxt;
                         THE YXEN -C
    4
    temp-next = * head 2-1 +4 som tought ) since
             11 don't los thought show the 1
9
```

```
stauch node * neages (stauch node * a, stauch new * b) &
          3 (JJON== A) 7?
                                              returnbi
      3
      1 + ( b == NOLL) &
                                   geturno)
         strauct node * c = NULL')
         i + (a-)dota = 5-> data) &
                                                      C->next = meager (=->next/b);
            9
.e1se {
                                C-Dnext = meager (a15-)next)
                                                            1 8 8 ( by + der 4) 177 ) volu 16
            return c's
                                                                                                     ACINCH = 1 hand salle
                               21,4111 dus 1 loed - > de to)
   3
struct node * midpoint (struct node + head) {
                              if ( hecd == NULL) Il hecd -> next == NULL) {
                                   setuan heed's
          Stand node+fast = head -) kext's
            stauct node+ slow = head )
             while (fest) = NULL & & fest -> next 1 = NULL) {
                    fort = fort->next - Snext
                    s low= s low -> nexti
                                                                                      of Chr. portect.
               returnsions totto de de la colosia de la col
  4
                                                                               1119134 > dolob & 108.1011
```

```
Struct node to mengeroat (struct node * Lead ) I
      if (Checd:=NULL) 11 Lecd-next==NULL) &
        netuan head's
         node* Mid = midpoint Checd)
      3
    Stauct noce * b = mid-> next in
   Struct
    mid -> mart = NULL's
    a = meage suat (a);
b = meage suat (b);
  Stauct node t c-measea (c,b)
    Aetuan ci Miller die Deserge dusil-
  void display ( struct node * Load ) {
                 Print+(4.1.2...>", Leed->doto);
        while ( heed ) = NULL){
                 heed = heed -> nexting him & office
                     6 se 1 11 7 0 50 10 1 6 seel 1 11
          paint +c"\n")i
     3
   int main()
  Struct rode * heed 1= NULL, * head 2= NULL, * Lead 3 = NULL,
                * had 4=NULL, to ans = NULL')
 Jut offerin's
  Palatel" ... 308ling .... 12, 27
  paint? (" enter he is) to be sorted ( Enter -1 to shop ): In);
  scorf (" 01.0", 1 dote);
  Wlile (dota=-1) {
```

```
inseatatend (bleed 1, detel)
   Sconf ("#102", bdcte))
   paintfc" list before realing: " );
  display [ haddisi
  ens = measewar (heed 1);
 paintf(") ist after southy; ")"
Painta ("\n.... Reverse --- \n"))
  display (ans)
Palatte" Enter he list to be severed ( Gates -1 lostop): /d')
Scor & C.1.1.9,1 kgcfc),)
while (dcto) = -1) {
          insert At End ( thed 2, deta);
           scort (1.1.4" / dotal.
 paintf (" list before sevensing; ")",
 display ( head 2))
 neverse (Leades)
 printf c" list often sevensing, ");
  display ( Locad 9) i
paint ("\n --- concatendion - - \n"))
PRINTEL" Enter he FIMT list (Enter -1 to stop): 70")
 scort ["-1.d", & dete),
& CI-= 1 atob ) slide
             insentatend ( &heed 3, detel)
              Sconf("./.d", & deta);
       printf (" enter he second list ( Enter -1 to stop): 11"
       Sconf("1-d", &dote);
```

```
culine (detel = -1) {
        insert At End ( blood 4, dote)
         Scort CILI.9, ', Backer)
                        mache sid total
5
 PRINTECT FIRST list: ")
 display (Lead 3))
 PAINTEL " second list: ");
 display cheed 4)
 concot ( theed 3, & head 4)
 paint+c" concataded list:")
                       1"(sbl- 1 "5"5") 12
 display ( heed 3)'s
 setusa o's
              atob I to de I know I do to
            1 (stable " 1 1 1 1 2 1 2 1 2 1 3 2
               1, 5 1 1 1 Cohon
```