```
Assignment 4
Write a program to injust and delete of
 in a linked list where a and k is taken from user
* include astdions
#include astallib.ha
 3truct Node 9
int data s
 Struck Node* next;
Struct Nodex head;
void Inject (int dato, int n) &
Node * temp = new node ();
timp -> data = data;
temp -> next = NULL;
if (n = = 1) {
 temp -> next = head;
                                              clastic bear
 head = temp;
seturn (0);
 void Delete (int k) f
Struct Node * temp = head;
it ( k = = 1) &
head = temp > next;
                                                       Grant Tox
for (temp);
return;
Node * time = head;
for (int i = 0; i < n-2; i++) {
temp = temp -> next;
```

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15 PARTITION OF SE
 temp > hext = temp > hext;
         temp > next = temp;
                                                                                                                                                                            hall be hall
void print ();
                                                                                                                                                                    VI Gille Bolon &
 tor (int i = 0; i < k-2; i++)
                                                                                                                                                                                  2 shold Burk
                                                                                                                                                                                   The Ball
      temp=temp -> next;
                                                                                                                                                                , Iva roland fork
      free (temp);
                                                                                                                                                               . Hand robely from
  int main () {
                                                                                                                              & (A tai, etab fai) to suit how
  int n, x, k;
                                                                                                                               Chromman Justice & state
 head = NULL;
                                                                                                                                                         , both whobsen
 Print of ("Enter the position for inserting: ");
 Scanf ("xd", &n);
                                                                                                                                                                                111- 11
scanf ("".d", & n);
                                                                                                                                                       i hand town of will
                                                                                                                                                                                i pour bound
Insert ( M, n);
                                                                                                                                                                                 dol martil
 Printf ("Enter The position to delete: ");
 scanf (" "/d", &K);
                                                                                                                                                           3 (1 har strong Blow
  Delete(K);
                                                                                                                                          ; hand prod water track
                                                                                                                                                                   10-11
print & (x);
                                                                                                                                                          , there will have
return (0);
                                                                                                                                                                          Comb Vill
 z
                                                                                                                                                      hard good y aboli
                                                                                                                               (Contract of the Contract of t
                                                                                                                                                 provides your grantes are
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2 Construct a new linked his by merging alternate nodes of
  two lists for example in list I we have $1,2,33 and in list 2
  we have [a,5,6] in nothe new list we should have [1,0,25,3]
  alt includo astdio. hs
  # include estallib hs
 struct node (
                                 1 1 CHUM SE 1 M. O.
  Int data;
  struct nodernest;
  void print list (struct node xe head)
  Printf ("id >", (pt, -> data));
  ptr = ptr > next;
                                                1 1 mm 12 18
  Printf ("Null In");
                                                 6 . 1.1
                                              J. 1 121 go 1308
  void push Letruct node & head; Int data)
  Struct node & new = (struct node) malloc (size of (struct node));
  new -> dala = data;
  now -> next = * head ;
   * head = new;
 struct node * merge (struct node *a, struct node *b);
 Struct node fake;
 Struct node spfail = faka;
                                Company of the state of
 fake . nest = NULL;
                                    while (1) ?
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if tale would in proposed for the land in the second
  to shall for an imple in hel I have $1,9,33 and in hit 2 }
Gail Shept by the ment of the 
 break;
                                                                                                                                                    it will a habit
                                                                                                                                             1.1 Till by Million of
  else if (b=N=NULL)
                                                                                                                                                      Johnson Kronk
                                                                                                                                                          i . Inh tol
   fail > next = a;
                                                                                                                                                      : Krowakay Friel
  break;
                                                                                                           ( how to kelon trust ) And Fair King
  else 1,
                                                                                                         ; (Cotable, 17), " - 10") }lasg
   fail =>next=a;
                                                                                                                                       Anne Marie
   fail = a;
                                                                                                                                   1: (" of 11 wh " ) } but
     a = a snext;
  fail > next- &;
                                                                                Cotal Port; hand or what I with I down him
   enturn (falanext: ) by go bollow ( about 1)
                                                                                                                                  intell folia with
    void main ()
                                                                                                                                  ; hand to be seen week
                                                                                                                                                Cart beat was
   int keys[]={1,2,3,4,5,6,7}
  int n = size of (keys) / size of key [o]
   struct mode ya = NULL;
                                                                                                                                       second the heart tracks
     4 b = NULL;
                                                                                                                           i while triber that touch
| for (int i = n - i; i> 0; i = i - a)
   push (& a , keys [i]);
                                                                                                                                         (1111) Hory . 1849)
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for (Int 1 = n-2; i=0; i=i-2)
                                                1.1 maria
      Pruh (&b; Kuys [j]);
                                               I haven
  Struct rede * phead = merge (a, b);
                                            ; (+ - - - 1) D
  Print list (head);
                                mig there is the track
                                    Clara to some from
 Find all the elements in the stack whose sum is equal to k
 #inducle <stdio.h>
 Int top=-1;
 Int x;
 char stack [100];
 void puch (intx); a black of all of the stands of the
 char pop ()
 int main (,
                                           (v tai) duy tau
 int i, n, a, t, k, f, sum = 0, count = i;
Printly ("Entre the number of elements with in the stack");
 scanf (",d",&n);
for (i=o; icn; i++) {
print f ("Enter next element");
Scanf (">.d", &a);
push (a);
prints ("inter the num to be checked");
scenf ("1.01", &K);
                                        Carly of Labora De M
tog (1=0; 1 cn; 1++)
f = pop(i)
```

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A second 
      Sum += tj
                                                                                                                                                              ·八本 11111111
   Count += 1;
   if (sum == k) {
                                                                                                                                                                                       LA CHILLIAN FOR
for lint j=0; j'c count; j++)
 Printf ("v.d", stack[i]);
                                                                                                    who I do the the single of the last
   break;
   push (+);
if (+1=1)
       Print of ("The elements in the stack don't add up to sum);
    void push (int x)
    Ext (top== aq)
                                                                                                                                                                                        A my tree . The
    printf ("In stack is FULL \n");
                                                                                                                                                                                      seturn;
                                                                                                                                                                                      top =top+1;
                                                                                                                               · (" and have the contract ") + the
  Stack [top] = x;
     char pop ()
                                                                                                                           branch of all ways of all still the
    if (Stack [top]=x;
     char popes
```

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Print + ("In stack empty")
                                   The said the said the said
   return 0;
                                       Con Eilmunder
   > = stack [top];
                                             ; garmel he or
   top = top - 1
                                    : (Fil mont ", Paril Hay
4 Write a program to print the clements in a queue
  in reverse order
  of a finite of the fort
  # define SIZE 10
  void insert (int);
                                      ( 12 - (2) 1 - 11 - 22 ) Ju
  void delete ();
  Int queue (w), f = -1, 1=-1;
                                            to a factor
                                     Lilana In this I fine
   Void main () }
    Int value, choice;
   While (1) &
      Printf L" In ** MENO米如 In");
     print of (" 1. Injection \n2. Deletion 3. Reverse 4. Alternate");
     Print & (4 In Entre your choice");
     Scanf ("1.d", & choice);
                                    3 Color Fifthert him
   switch (choice ) }
   Case 1: print f l'Enter the value to be invert: ");
                                     Scanf (" y.d", & value);
          Insert (value);
          break;
   Care 2 : delete ();
         break;
                                      Mari) rsive
   Case 3: print ("The Keversed queue is ").
```

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Marie L. M. Marie
  for(int i = s1z&; i> = 0; i--)
                                                17 anatre
                                           if (quene[i]==0)
 continue;
                                             1 - put 12
 Printf (",d", queue [i]);
             range of the adjust that of one parts attack
 break;
 Care 4:
                                           (iht ships
      Printf ('Alternate elements of queue)
                                           101 9 212 Sallah 14
   for (int i = 0) iestz E; i+=2)
                                           . This togat Bar
                                            1. Talak 1.30"
  If (queue (i) = = 0)
                                           to prince post
  continue;
  print ( "/d", queue[i]);
                                             700 mon hole
                                          and water done
  breaks
Case S!
    ExIT(0)
                          a contract of a light of
  DEfautt: print/ ["wrong reliction")
                                      interest of the formation of
34
                                 Commence & Later Difference
void intert (int value) {
                                         if (lf ==088 x == S13E-1) nf= #8+1)
Printfl" (n Ovace in FULL")
else &
                                    11 a Jan toxal I
  if (f== -1)
 f = 0;
                                        it is the state of
  8 = (1+1)7. SIZE;
 quene [x] = value;
                            Went White
                                     Scanned with CamScanner
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When they was proportion in the
      Print of 1" In Inscition ruccess ");
   void de lete () &
                                                of other should be
    if (f = = - 1)
                                                 1. J. W. Jones Jack C.
    Print + ("In Queue is empty")
   else g
                                                          , bah F I
     Printf ("In Deleted: 1/d", queue [f]);
                                                 Burnelow Buck
      f = f+1) y. size;
    if (f = = x)
                            and the first hand wetchen touted from him
    f= ===);
                                      Franklin a) - Francis or 16 th at a
Si How array is different from the linked list?
1. An array is the data structure that contains a collection of
   timilar type data contains elements whereas the linked list
   às considered as non-primitive data structure, contains, acollections
   of unordered linked elements known as nodes
 2 In an array, memory is assigned during compile time while
   In a linked list it is allocated during execution or runtime.
3 In a hinked list though, you have to start from the head and work
   your way through until you got to the fourth element.
4 The requirement of memory is less due to actual data being stored
   within the Index in the array to against, there is a need for more
  memory in the linked lists due to storage of additional next and
   pherious referencing elements.
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Write a program to add the first element of one list to
 another list.
#include estalio. hs
#include establib ho
                                     Took is not well
int data;
                                   a the radius of the paint
 Struct nodex next;
void push (struct node you head ref; Int new_data);
struct node *new-node = (struct node *) malloc (size of (struct node));
new_node -> data = new_data;
hew - node -> next = (* head - ref);
 (* head - ref.) = new_node;
 void print list (struct node sphead)
                                            Lit il la whimm
 struct node & temp = head;
 while (temp!= NULL)
                                         In it has real all to the
  Printf ("Y.d", temp >data);
 temp = temp - next;
                     continue of the continue of the
Print ("(n");
                                    specially provided the second
```