Name: E. Herrasundur ROLL: APPALLO010481

```
1) drs:
      # include LStatio.h>
      # include < stallib.h>
      struct rode {
       int date :
       struct rode * next;
      3:
      Struct Node * head;
       roid Insert (int date; int n) {
       Node * temp = new node (1;
       temp -> next = Null;
       temp -> data = data;
       if (n = = 1) 5
      temp -> next = head ;
       head = temp;
      netum;
```

```
void belete - (int k) &
    Struct Node 1 temp = head;
   if (k = 1) 5
   head = Temp -> nort;
    Free (temp);
    neturn ;
                to the department of the second
    node * temp = head;
                         Edd 13 has a character
     For (int 1=0; icn-2; ita) (10000 > 00000 0
     temp = temp -> next;
                                   obon buns
     3
     temp -> next = temp -> next;
      temp -> next = temp;
       void print ();
  ( b for (int i=0; 12 k-2; itt)
the femp - hear; agran bring " ton turns
       Free (temp).
        3 : grand start burts
        Ent main () & primates a that - about trusted
        int n, x, k; . Here Less promue
                                      (1) Stuto
         head = MULL ;
        Printf ("enter the rosition for and Inserting:");
                          in (a = viui)
        Scanf ("1.d", 2n);
        Scanf (" 1.1", &x);
                           . Heart in April Courts In .
                          A TO BUSH OLD I WA
        Insent (x, n);
        Print F ("Enton the Most Hon to delete");
        sanf( e,de &k);
        oetre (F);
```

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```
2 (4 the) . Stoley Line
           Print (X) >
                                asser good " then they;
           neturn ,
          3
                                       : Hone gmoi bond
                                               hoc (40mp);
                                                    : montan
2) Ans :-
         #include Cordio.h>
                                       mode * temp shead ;
         # include < asserting ti : s-n > i : 0 - i tri) rol
         # Include c stall b.h>
                                      : train - gmot = gmot
         Smuch note
                             temp - next - temp - next;
          int data;
                                             temp - next
                                    : 4emp ;
          Struct node * nex E;
          3;
                                           ( ) Irring bigy
          void more node (smult node **x; smult node **y);
          struct node * Sorted rerge (smut node * 0, struct node b)
                                           (4mp) 9977
          struct node dummy:
          Struct node & tabl = & dummy ? () along
                                          int n, x, F;
          dummy . next = Null;
                                          : www - band
          while (1)
          ( "Enten the rot notized the return") from
           it (a = = Null)
                                    : ("8 "6 p") make
                                    · ( 18 " 6x 1) 11000
            * y = now node > next;
             new node -> next = x x:
                            high ("Sucon the Mattern to b
             & x = new hode;
                                        SWIF ( "X JT BK) ;
           3
```

```
void push (struct node " head - net, int now - data)
{ (B. " of the homes y " o had have ) - Obon Syon How
 struct node new - hade = ( struct node) (*) walled (5120 or struct node);
 new - node -> data = new relata y had mad " about 1 100%
 new-node -> next = (* head - Teb);
 ( head - Teb) = now - node;
                                        1) whom his
 3
  while (node >= Nun)
                       struct mode " a = null
                         Street hede * b = null!
    Printf (" 1.d", hode -> data);
                                 1 (E, p +=) 1/2M
    hode = node -> next !
                                  AUSh ($0,2):
                                  (1 (2 (D +) NUA)
    tail -> next = b:
                                  RUST (40, 4),
    break '
                                  · (3, 87) AUS)
    3
                                 1(a,d+) 1/3x9
     cuse it (b== rull)
                     res = Souted weige (a, b);
     tail -> next =a; 2) 1211 Estate option ") inter
                             ( (397) hour 7 min
     break;
     W (a → data <= b → data)
     move node {+ (with next), 2 a);
      tail = tail -> next;
    return (dammy next);
```

```
cold - ores in the Early topic, dainy how
void move node = (Smut node ** x, Struct node ** y)
or outs) talker ( Mosto , groves) . Oher - Oracs " obors from ,
       node * new hode = * y que dish - ofon war
                    (890 - Proof +) = grow & - Other WITH
                            9204 - 0001 . (895 - 1,001 *)
 assort (new node ! = NUIL)
 int main ()
               (olar * Jon torrs) has trilor
3
  Strut node * fies = nul;
  struct hode * a = null; (rule ac alon) alider
  Struct node * b = null;
                     ( (phote aport " P. 1. 1) 4 mill
    Push (# a,1);
                              · Jugar - about - about
    Push (+ a, 2);
    Push (+a, 2);
    Rush (+b, 4);
    tush ($6,5);
    tush (+6,6);
                              ( Mar = 47 di ous
    res = sorted merge (a, b);
    Printf (" Merge linted list is : \n")
    Printf flust (res);
     netwin o;
                        to the contract of the
                  to a (thoughthing of the and
```

```
3) Ans:
      neturn 52 [7017.7] (n. oibras abubni #
      int 81[10]; 40P1 = -1, 82[10]; 40P2 = -1;
      int si empty()
       {
       if (40p==-1)
       return z;
       else
        return o;
       3
       int 61 TOP()
        setum 81 [TOPE];
                               able (83 ently (); = 1)
        int SI. POPC)
         TOP 1 -- :
        3
        int SI much (Inta)
         81 [++TOPI]=x;
        int so ampty () got so, it, in/ (Liv. bar) attains
        ٤
         if (1012 = = -1)
                                 : (( )) of to) down -
          netwin 1;
          else
            return 10;
         3
```

(1907 CA 15)

```
int 82 TOPL)
netwan 62 [TOP2];
          1 - 1904, TOLTISO L - 1905 FORTE + 10
                                   OHAMO 18 to
 int SI POP()
  10 P 2 - - ;
int s2 Rush (int 2)
δ2 [++ TOP 2] = x;
3
 int sum (int k)
                             : [24 of] 13 nautuc
 int x;
 cohile (s1 empty ():=1)
                                   (1101. 13 tm
 ٤
  X = S1 TOP();
  SI POPC);
 while (81 empty () ! = 1)
                                ( in this is the is the
  (x = () 405 x8 +x) +i
                                61 [+ + 10p1] = X.
  Printf (7.d, v. 1) In", n, sytop () pho as the
  3
   52 rush (S1 TOP());
  81 POP ();
  ટુ
  while (sz empty ()! = 1)
 51 Rush (So. = TOP()):
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```
Amude relations
                                     at define size to
        int main ()
                                    : (tri) troons you
        3
          int n, i, e, k;
                                     (1) stotel sid
          wint l'enter the no. it elements or stack: (n');
           scanf ("y. d ? &n);
                                          () NION STOY
           for(1:0:12n;14)
                                   int rawe, doing;
           scant (4 %9 4 86);
            81 pub (e): " " men " " " min!") Haid
our trial leviner the value of constant our
                                   constant sam: In ");
        : (scant ( " x d , 2 k) ,
           Printflu The combinations whose sum is equal
                                  3 ( Golde) Notice) [
            Sum (K);
         I(" discret of our of 19th 19this") april
                       : ( Sulley 2 "6" ") Trans
                               ( July ) 492801
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SI POPL);

```
4) Ans :-
```

```
#include LStdio.h>
# define Size 10
      insent (int);
MOF
 void delete ();
: What dreams (Trollande + Trans-Trolland) store
void main ()
                       (H1; MS1; 0=1)70)
 int valle, choice;
                       (9% , 1 3 m) amos
 while (1) $
    syntf ("InIn *** menu ** ~ (?)");
  Printf ("1. Insortion in 2. Deletion in 3. bint reverth
            4. print alternately 5. exit. ):
   printf ("In enter your choice"); IJTHING
   Econf ( , 49; 8 choire);
   switch (choice) {
                                Sum (K);
        case 1:
          printf ("Enter the value to insert");
          sount ( "1.1 & valle);
          insect (value);
          break;
           case 2;
           delete ();
            break;
            (08e 3:
             Printf (" the Reversed queue is ");
for (int i= 81ze; i = 0; i --)
```

```
pinge (" In Installor Euclers");
 if (queue [i] ==0)
 continue;
 Printe [ x. d , queue [i] ) } () atom for
3
nbreak ; bus gland as such as stimme
 ase this ad the
     Printf ("Alterate alements & quedo asie");
     For (Int i=0; 12812e; 11=2)
 8:([1) anon6 " 7 1. Patalad W. ) Hall
   conflure: (u=3) !!
    continue;
    PHATE ("X 4; Que cle (13); =====
  3
    break :
   case 5;
      exit (0);
                        TIMULUS CERTIONS
   default:
        Printf (" In wrong selection");
                              Shurt hurte
  vold insert (int value) §
        if (( F=0 && N == 81 &C-1) | F==n+1)
         Printp (and aueues is full and insertion and be
         eue { , bood : 179 * olar turns
        n= (n+1) // size ; " by " by ") + will
   F=0;
        queae (n] = vaue; 10 131 - 111
```

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```
printf ("In Insention Euccess")
                              (a · Lis snoop) 71
       33
        LOIA Genera () & ( Dis anomb " P 1 , ) Hory
           if ( f == -1)
       mintfl'in Brueue 16 empty and poletion
       can't be done")
     ("ofto celle for should streetly") + tours
                 (C-11 : 9518 >1 : 0=7 INT) VOT.
               Printf ( in poleted 1.6, queue(f]);
        F = (+1) 1/517e / 90900) H
       if (f==n)
          F= n = -1; (ED 915 911 , 6 x , ) 40013
               (a) +(o)
5) Ans :-
         # include cotdio.ns
              Charte ( , Lu novered sciention) .
         + include cotalibin)
          Struct hada
          {
            int data; } (substitution) to the time that
       (1 17 - 7 11 (tode * next ) 28 0-7 2) 71
of the not void Mintlist (small hole head)
        ({anob
           Struct hode * per = head . } all
                         (F - = = 1) H
           (rt) 01/10
          {
           minf ( ord , per >data) ...)
            Ptr = Per -> next yor = [ii) 92949
                                         Scanned with CamScanner
```

```
void such (struct node ** head, int data)
                          nore hode (da, kb).
                           ! (" ) 80 ( 1887 ") 9 WON
  smut node * new node = (struct node) * mulioc
                          (Gize & Strult node);
                            ( " terry by by man " ) i to the
    new node -> data =data;
   new hode > next = " head :
     * head = new hode !
  3
  voide move have (struct note ** dest ver, struct node **
                                     Source vef)
  3
    if (*Source ref == NULL)
     netwon;
     Struct node * new node = * source ref;
    "Source ref = (" source ref) -> nent;
      new node -> next = " dest vef;
      "Lest ref = now node;
    3
    int main (void)
    int keys[] = {1,2,3?
   int h= 5120 @ (Keys) ( 5120 @ ( Keys [0] );
   Struct node " a = NULL!
  for (int i= n-1; i>=0 ; i--)
        rush (8a, Keys [i]);
  Street note "b= NULL;
   For (int 1=0; 12n; 14+)
        Push (Bb, 2 * key & [i]);
```

(atob fri board " show ton More hode (Aa, &b); new node = (strut hade) - 9600 was ; (a) test fortry (Size of struct ande): Printf (" second list"); Printlist (b): -> head = " head -Meturn D: new node note (Struct note ** dost ver, struct node *

Sowice ver)

ref c = Anill