Name - Sajidul 9, Lam Saief ID : 2020-1-60-149

Ans to the a.No: 6

g don't think neversing a cincular limited Int is alukward usyla of to prisorary of void revense () a skuesod promymo jou i Mode head = AWELYON II AND Node current = head; . storis Node * preuz NULL ment = NULL; while (current != NULL) & nout = current -> next; current - nout = prev; minn fri prevz currentilmum </mi> current & next i mur quoivares troi mead = previ void push (int duta) d Node stemp z new Node (data);

temp -> next = headist

Antaily automin a Emerson wint trash & so reversing of a circular Linked list not awkwand because a cincular liked l'st is where all nodes pare connected from a cinele. (bood stoomy) 4° 36000 (1100) Amonto, the O.No. 4° 36000 while (correct != Nall) & than & twomen . their int main (void) d vector < m+> numbers in our vary int previous num ben([5); in more While (1) 2 int tmp; Cim >> tomp; (whole dai) door blok humber push buck (tmpp);

```
if (tmp(0)
                 ilhnoss town b
   int pon_mums, _ Less _ then_ 5 = 1/31 ) not
 for (int i= 8 numbers size()-273 (>= 0)167-) 2
                     Abrass Juns
if (numbers(i) > 0)
     if (numbers (L) <5) }
     pas_nums_less_than_5=1;
         break; }
previous_numbers[count]= numbers[i];
            count ++)
    if (count == 5) ( ) mion (mi)
           break; fic - mur fri !
if (eount <5 11 pos-numi_Leis_than_5 ==1)
      2 cout (" Display Not hing" (cend)
                                     bneak;
```

```
r
lse
                           (osgart) 7i
     d count ((end))
                         io-towas toi
     for ( int = == 5 ; 1 >= 0; 1-)
 (Coutes, previous_numbers[i] (<end);
      Cout ccendl
                   (Oc Ci) cradmum) 71
                  $ (5) (D swap wan) $!
              pas_num_2010_than_5=1;
                          break) "
    (( )) 100 6 mun Aminto of the Q. No : 6
     int main() () int main()
      L int num=3;3 1 10 34d
for (int i=0; 122; i++) d

(1==2-mint audimorran - 009 11 23 /muns) 7:
  Engo Cinxx " Cata jois dota jos }
```

Scanned with CamScanner

```
Homewcode = newe Node (data);

d)

if (head = z NULL) {

torrease to torrease 
                                                                                                     head = newnodery I to . stroggy
                                           Plse
                                                                                                                                                                                                       . drow for i di
                                                Node * tem= head, de tem 2 = temp;
while (tem-os != NULL)
                                                                        d temp1 = temp;
                                                                      Remps tem (stemi) neatharm biov
                                                                         I ten 1 2 mout 2 mouro de i son !
                                                                          newinsent (3); anota show
                                                                                                                   for (int i=1 ) ic p(0) it +)
                                                                                                                                                                         ed toral a tenti
                                                                                                                                       Same whike (i)
                                                                                                            new in sent (1);
```

No eash of the input do not work at any posit properly. It I want to insent it is not work. 1 grant A Corry B, Anod a Colo show D mat = Camit) void insentangeon (int da) L Node * newn=new Nodeldal) int Pon=2; Node *temp z head, *temp 2 i for (int i=1 ; ix pos; it +) of temp 1 = temp; temp=temp=nont; tempt - neut = newn;

newn - neut = temp;

```
Ans to the Q'No: 5
(a)
   class Node show was anum & show
 of public:
              inwar every to book
  int OD;
   double mank; immor = book
    Node & prv;
                  ( ) rione Ini
   Node * nont;
  Node (int oid)
     70 200; ( mums / (0 ) / mi) mot
    Prov= NULL;
    nont= NULL;
  Cout est Inten the data " = end ()
   ( ( codes) show war = show war
               if (head = NULL)
```

```
(6)
    Ams to the Willo: 5
   void insenatbeg (double man)
 d Node znewnznew Node (min) most
  newn -> newl = head;
   head - prove newn;
    head = newn;
                     double mark i
 int moint)
                    ithory. Sholl
                      (dja + mi) 960 VI
  int num = 3;
  for lint (=0) (< num; itt)= de
                    EVAVE NULLS
               nort- MULL;
  int data jidi
 cout << " Enten the data" << end 1;
ein >> dada ) 1);
new node z new Node (andra);
 if (head = NULL)
```

```
head snewholes on A
```

```
e Csede of susus
         Node & temp = head, * temp = tem;
   while (temi=NULL) romotavo o rodu
       of tempt = femb? ory and them at space.
(07/2) tuo temp -> neuti of volimis doum
  did in moitibres tood
         temps - neut = neumode; ~ suoup 03
         ne wrode -> prv=tem 1;
         3
                         (Us 1 Jmi
          insent bag (10);
          in sentbag (20); "of ruos" > 2 truos
          insent bag (30); (0= 1 1 mi) not
 it ( queux main - show () >= 18 & & que & roin-
  local Loons
          & coul et quevernain - shoul) (" ")
                         ( 1 = )
```

Am ito ora, No: 1

we need to use queue to solve, this
problem. when a customen (comes in the Line, he problem. needs to wait for his term. This is very much similar to first cin first out (17276) so queue is the best conditions in this ne wrode - privatemili case. int f=0; Count 20 "Counter 2: " ; (as) Budtors pri for (int i=0; i((10) ; i++) 2 if (queue Main -) show () >= 18 & & queue main-Shou () (30) of cout (queverain -) show() (";

f = 1;

```
temp = que ve Main - showl);
   queve Moin - ) udeque () in o Monguo up
   queue Main -> enque (temp);
-if (f=0) conf << "NULL" < endl;
  else f cout conditions so two so
       f = 0; () : E rotonos ">> fue?
 conf. < ( "Controls (- mom anana) 31}
for (int i=0; i<10; i++)

d it (queuemain-) snow () > 235 Ll que ue Main->
    anent main - Emere (femp);
temp = queue main - jshow ();
```

```
queue Main -> deque();
             queue Main - Juanque (temp);
               frenches - Ederates to Monor
          if (f = = 0) Couter "NULL" zendl;
           elsed
               cout condition 1, 5219
          Cout <<" counter 3; "; 0 = 7
       dif (aueue moin -) show(1) 22 45 14103
e-mioManaus 92 10 f = 13 11 (0=1 /mi) rof
           tempz queve Main -sishowlalis) 41 6
            queuermoin - enqueue (temp);
       7 if (f=0) cout << "NULL "xends;
else { cout << end s;
() work (=0) and sugus = q mg)
```

Ans to the Q. No: 3

Dest idea to use areve. In avere we can limit the number of students, we can limit the number of students, Each time a student amiver and sit on a choire then others have to wait. It is similian as FIFO. So queue is the best choice to solve this

(b) int infull (all vene * queue)

d neturn (queue) size = queue - , capa eity)

Void en que (aveue * queue, int i)

Lif (in Full (queue))

neturn;

Are the article. queue - neur (queue - nearti) and i raboro magazique ued => capacity; of queue - ama & Caueue-near] z li queue - cize = queue -> site et ligo cout's de l'étéranqueue to queues in the firm of small mall riols similian as FIFO. So queuxo in the dit sulos of stieds (3 usupa sugus) o) Itufij tri (the man (docos -) sise - docue -) con busines (i trei insur x queur) jout i) ((943Up) 11v4 is) \$1 } i Krat scr