```
Quection!1.
 # include (stdio.h)
 Unsigned int heap [10001], Index [10001], Position [10001], Size = 0;
 unsigned int Temp [10001], Temp 1 (10001];
 unsigned int Arr. Time [10001], cook-Time (10001], Num;
 void merge lint low, int Mid, int high
    int i = 10 N, j= Mid + 1, k= 0;
   While (i (= Mid & & j <= High)
    if ( Am - Time [i] <= Am - Time [j])
    Temp (K] = Arr_ Time (j)
     Temp (k] = (ook-Time(i),
    Temp 1++1
       else
         Tem b (k] = Am - Time (j);
         Temps(K) = cook-Time (j);
         1++;
       3 K++
     if lik=mid)
    for (I=i, I <= Mid; I++)
```

```
{Temp(k]=Am_Time(]]; Temp][K]=(OOK-Time ()
else if lik = High)
            wise Level Ashar Lovell Next to be a
             There I am Aleen And the start of
for (J=j;J<mid, I++) [mont on the house
{ Temb [k] = Am_ Time [J]; Tembs (k] = (ook - Time []]; k++;}
                    ELIPATE BANG PROPERTY
else if (j(= High)
                    The part of the part of the
 int ];
for []=j:, ] <= High; ]++)
{ Temb [k] = Arr - Time []]; Templek] fook - Time []; b++j)
                         100 - 100 2 12 1 day
 K = D
 for li=low; i(=High; i++)
   Arr_Time (i] = Temp (k];
  - Cook - Time (i) = Templ[k]:
   K++;
 void divide lint low, int high)
  if (low (High)
   int Mid = (Low + High) /2;
```

```
divide (low, mid)
   & di vide (Mid + I, High); (I while I will be
 Merge (low, mid, High);
                         SAC (SAN) XShirt non inch
void Insert (int Mode, unsigned introduce)
   ints;
   il [Position [Node] = = 0)
 { Heap (++ Size ] = Valle;
   Index (size ] = Node;
   Position [Node ] = Size;
                                  (I) Notat Balling
   S= Size;
                                        HE SE
  else
                                  RE W. molecul
  Heap [Position [Node]] = Value;
    S= Position (Node ];
 while (SJ = L)
   if [Heap (S/2] > Heap (SJ)
  { int t = Heap [5/2];
    Heap [S/2] = Heap [S];
   Heap (S) = t;
```

```
t= Indo [512];
                               (birthold shows)
   Index (S12) = Index (S);
   Index (S)=t;
   Position [Index [S[2]] = S/2;
   Position [Index [S]]=5;
    else
   break;
    5=5/2
                           suboth of paid as has
  Extract - Min ()
                           as a glocal months.
  int N= Index (1);
   int S=1;
11 print f (" 1.d \n", Heap (1));
   Postion [N]=-1;
  Index (1) = Index (size);
 Position [Index (size]]=1;
  Heap [1] = Heap (size -- ];
  While (1)
                     了个人们与什么不多的。
    int T;
  if 1 Heap (5*2] ( Heap (5) 88 5 * 2 <= size 11 Heap (5* 2+1)
     (Heap [s] && s*2+1)
       (Heap Cs* 2] (Heap Ts * 2+1])
```

```
T= S * 2 ;
  else
 T= S* 2+1;
  int t = Heap (T);
 Heap(T) = Heap(S);
 Heap (s) = t;
 t = Index (T);
 Index (T) = Index (S);
  Index (SJ=+ Line )
 Position (Index [T]]=T;
 Position CIndex(SJ)=s;
        Au . Inc. To be the limit tell his
 else
 break;
 S=T:
victorn N;
void In it (int N)
E
for ( i= 1 ', i <= N'; i++)
 Position Cil=0;
 Index (i]=0;
Heap [i] = 1000000001;
```

```
Size = N'
  int main ()
                                        int A_T, (-T, i=1;
  Jong Jong wait - Time = 0, Time = 0;
 Scanf ("% d", & Nom)",
 11 int (N);
for (i=0, i < NUM, i++)
Scanf (1, 1, 0, 0, 0, 0, 1, 2 AN_ Time (i), & look - Time [i]);
divide (0, Nom-1);
for (i= Num; i) = 1; i+-)
          AN - Time (i] = AN - Time (i-1);
  Cook - Time [i] = look - Time [i-1];
 // print of I" /s u , 7. u In", Arr _ Time [i] , (ook - Time [i]);
  Insert (1, look-Time (1));
    while lik = Nomg. J. Arr. Time [i] Arr - Time [1])
  i = 2
    Insert (i, look - Time (i));
   3 1++;
  While [size !=0)
    int I = Extract . Min ();
   if (Time > Arr - Time (I))
```

```
E Nait - Time += Time - Ar - time (I)+(ook - Time (I))

Time += (ook - Time [I]);

I print ( "/ d / d / d \n", I, Time, wait - Time);

else.

Enne = Ar - Time ( I]+(ook - Time (I));

Wait - Time + = (ook - Time (I));

I print f ("/ d / 11 d / 11 d \n", I, Time, wait - Time);

I print f ("/ d / 11 d / 11 d \n", I, Time, wait - Time);

I shile (ic= Nom && Ar - Time (i) c= Time)
```

grey.