```
11-07-2024
INSERTION SORT!-
-> main ()
    int a [ 207 , i, m;
    wantf ("enter m: ")
     scanf ("1.d", km);
     want ("enter elements ");
                              进步了入。华军的也
     don (i=o; i < m; i++)
                               e de directo
     scanf ("2.d", 4 a Ci));
                              tribe lities
     invertion - eart (a, n)
                              film dia
      for (i=0; i<m; i++)
      wint ("7.d", acts)
                       end in hit wie lide in th
          insertion sort ( int a C), int m).
  void
```

```
int 6(20), 1, 3)
                                                                                                            Commenced Allander De 1996
             pc0) = ac0);
              for (i=i )i(n;i++)
                           for (i=i-1; aci) < b(j) 4d j >= 0; 5--)
                                                                                                                            CONTRACTOR OF
                           b [i+1] = b [i] )
                                                                                                                                           The Control of the Co
                             b(j+1) = A(i);
               for (i=0; i < m; i++)
               aci) = bci);
                                                                                                                                                                 ( ) over
160 x 20 24
                                                                                                                                                of distant
     QUICK SORT =
                                                                                                                                          June 1 1 Contract
                                                                                                                                           Line of the fails
   Procedure =>
                                                                                                                                           Harry Halling
> select 1st element as i
- select 1st element as Pivot
                                                                                                                                         是文化: 第二十八四人
  > select last element as i
   -> Enverge i until aci] <= acp], i++
   - Decrease i until a (i) > a[P], i-
   => If i, i donot crosses eachother such a Ci] + a Ci]
     -> Repeat 4 4 5 steps until i crosses i
     > of i crosses i surapi a Ci] & a Cp]
```

```
main ()
   int aczos, m, i;
   printly ("Enter m: ");
   scanf ("7.d", 4 m);
                              A POR THERE
   joint ("Enter elements: ")
    for ( i=0; i < m; i++)
    scarf (" 10", Lucis);
    quick - sort (a, o, m-1)
    for ( i=0; i < m; i++)
     printf ("1.d", a(i));
  void quick_sort (int a [], int 1, int h)
                      11 p > pivot element
    int i, j, P, ±;
    1: P=1;
      J = h;
      while (aci] <= a[P])
      while cacis > acps) size 4
      y liki)
       t = aci]
       ACi] = ACi];
       ACIT = t;
```

t = a [];
a[] = a [p];
a[p] = t;
quick_sort (a, 1, 1)-1);
quick_sort (a, i+1, h);
}

MERGE SORT :-

```
nam ()
 int a [20], î, n;
                                    Time of the
    winth (" Enter m: ");
    scanf (" 1. Q", L:n).
    winds ("Enter elements: ").
                                        ' में पेड़िंग भीमी।
    for ( i = 0 ; i < m; i++)
     Scanf ("7.0", 4 a[i]);
    merge - sort ( u, o, m - 1);
      for ( i=0; i < m; i++)
     fruit ("1.0", a(i));
   void merge_sort ( int a [ ], int 1, int m, int m)
     [05]d tri
     int i= 1, i= m+1, k=1;
     while (ic= m dd j k= h)
     Ty (uci3 L= aci3)
           b[k] = a[i]
           i + + ;
       clee
          bckj = acij;
           i++;
```

```
While (iczm)
   b[k] = aci];
    i++;
     K++;
while (3 k=h)
    b [ 2] = a [ 3] ;
     i++;
     k++;
 for (i=1; i<=h; i++).
     aci] = bCi];
```