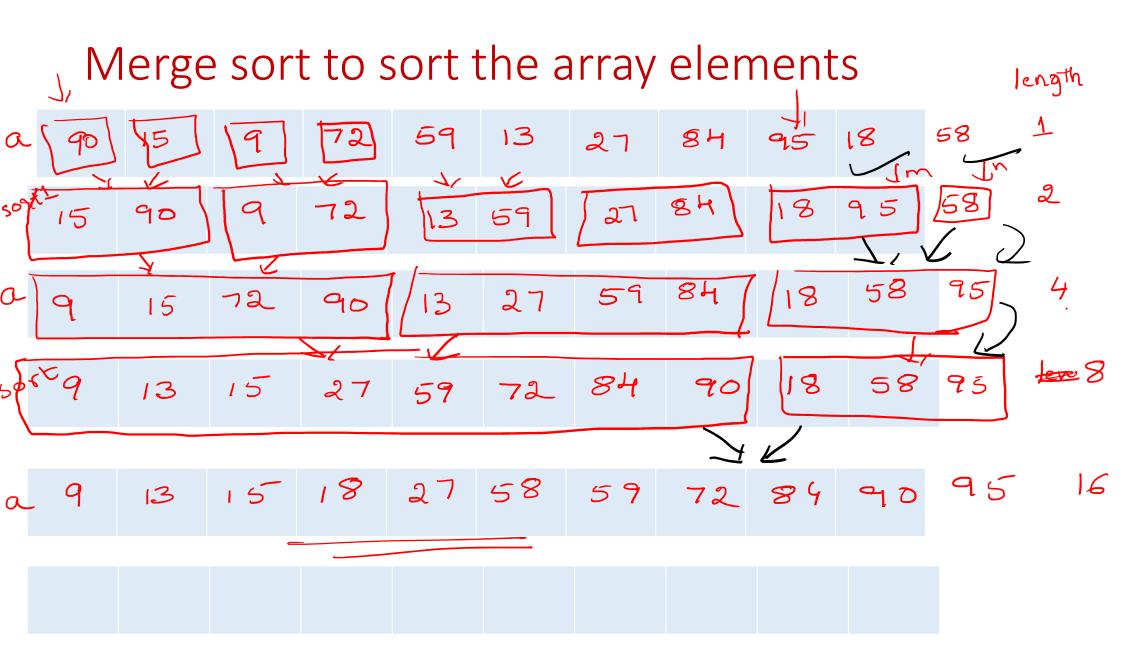
Merge sort Jan-01 2022

Logic to merge to sorted arrays: $a[16920-\frac{0}{5,9,33},49,50,10,23,24,30,31]$ S['' 75, 9, 10, 23, 24, 30, 31, while (1<= m &x ,i <=n) if (a[i] < = a[j]) S[K++] = a[i+1]; e)se S[x++] = a[i++];

```
void mergesort(int a[],int sort1[], int i, int m, int n)
                                                                              7
                                                            m mxl
int j,k,t;
j=m+1;
                                                                    2nd array
k=i;
while(i<=m && j<=n)
                                                                                      SORTI
 if(a[i]<=a[j])
   sort1[k++]=a[i++];
                                         KIL
 else
   sort1[k++]=a[j++];
while(i<=m)
 sort1[k++]=a[i++];
while(j<=n)
 sort1[k++]=a[j++];
```



```
void mergesert(int a[], int n)
{
    int len=1;
    int s[MAX];
    while(len<n)
    {
        merge_pass(a,s,n,len);
        len=len*2;
        merge_pass(s,a,n,len);
        len=len*2;
    }
}</pre>
```

Thank you