

Merging Arrays

- Combining 2 sorted array into a single array is called merging of arrays
- Its a binary operation means it needs more than one array so that it can combine
- Some other binary operations on array where you need more than one array are APPEND , CONCAT , COMPARE , COPY
- Merging can only be done on sorted list
- For merging we take pointers

Ex :

A

3	8	16	20	25
0	1	2	3	4

i

B

4	10	12	22	23
0	1	2	3	4

J

C

3	4	8	10	12	16	20	22	23	
0	1	2	3	4	5	6	7	8	9

Ex :

```
i = 0 ;  
j = 0 ;  
k = 0;
```

```
while( i < m && j < n )  
{
```

```
    if(A[ i ] < B[ j ] )  
        c[ k++ ] = A[ i++ ];
```

```
    else  
        c[k++] = B[ j++];  
}
```

```
for( ; i < m ; i++ )  
    c[k++] = A[ i ];
```

```
for( ; j < n ; j++)  
    c[k++] = B[ j ];
```