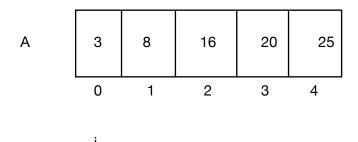
## **Merging Arrays**

- 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:



B 4 10 12 22 23 0 1 2 3 4

J

| С | 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]; \\
```