

# Priority Queue

A-7 5

B-4 4

C-2 2

D-1 1

E-3 3

Lower the number is Higher the priority

1 2 3

Ascending PQ

Descending PQ

1) Array , 2) Linked List

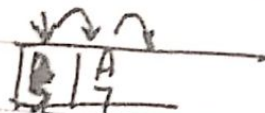
3) Heap

Array Insertion

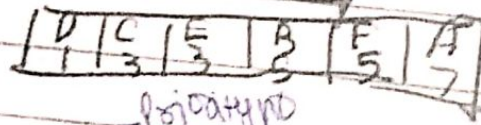
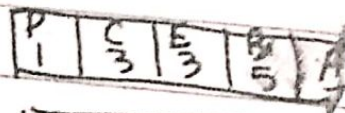
Array Deletion

Insertion in priority Queue →

A, B, C, D, E, F  
7, 5, 3, 1, 3, 5



C & E have same priority  
∴ follow FIFO



priority

ALGORITHM POInsert (A[], N, P, N)

BEGIN:

i = 0

WHILE P >= A[i]  
i++

Array Insertion (A[], N, i+1, P, N)

END;

Time - O(N)

Date:  
Page:

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ALGORITHM PR REMOVE (A[], N)

BEGIN:

$x = \text{Away Removal}(A[], N, 1)$

    RETURN  $x$

END;

Time -  $O(N)$