

## 09. Heaps

dbserver.korea@gmail.com



## Agenda

- Heap Problem
  - Heap ADT Implementation
  - Optional Problem

## **Heap ADT**

- Implement a Heap ADT
- Operations :
  - heapCreate create an empty heap
  - heapDestroy delete all elements of the heap and free heap
  - heapInsert insert the value into the given heap
  - heapDelete delete the root of the given heap
  - heapCount return the number of
  - heapFull return true if the heap is full
  - heapEmpty return true if the heap is empty
  - heapTraverse traverse values in the given heap
  - You may add additional functions to implement heap implementation (e.g., reheapUp, reheapDown...)

## **Heap Sort**

- This slide is optional. (It is not mandatory)
- Implement a heap sort.
  - Make a sort function
  - Sort an array