



# **Build Heap Analysis - Heapify Down**

# Learning Objectives

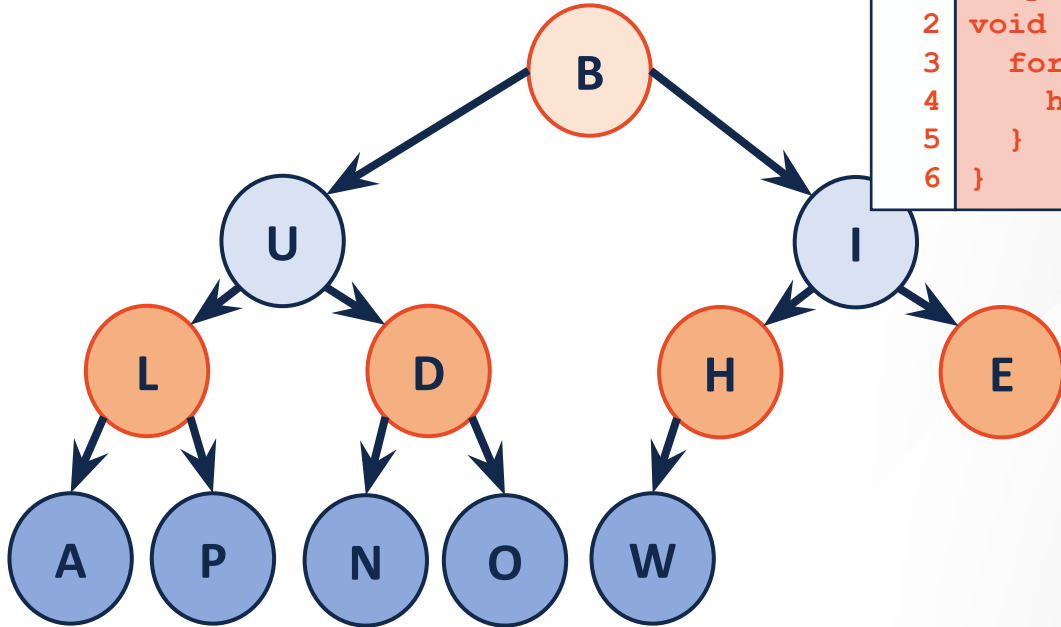
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1. Know the runtime of Building a Heap with HeapifyDown



# BuildHeap - HeapifyDown

```
1  template <class T>
2  void Heap<T>::buildHeap() {
3      for (unsigned i = parent(size); i > 0; i--) {
4          heapifyDown(i);
5      }
6  }
```



# BuildHeap - HeapifyDown

Level	Number of Nodes	Amount of Work per Node

