Interview Prep

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1 Data Structures

1.1 Linked Lists

1.1.1 Implementation

```
LinkedList<Integer> ll = new LinkedList<>();
```

1.1.2 Operations

1.2 Trees, Tries, & Graphs

1.2.1 Implementation

1.3 Stacks & Queues

1.3.1 Implementation

```
Queue<Integer> queue = new LinkedList<>();
Deque<Integer> stack = new ArrayDeque<Integer>();
```

1.3.2 Operations

1.4 Heaps

1.4.1 Implementation

```
Queue<Integer> heap = new PriorityQueue<>((n1, n2) -> count.get(n1) - count.get(n2));
```

This is a paragraph. It is underneath the heaps category. Heaps are data structures that keep a min or max value ready for popping locking and/or dropping.

1.4.2 Operations

1.5 Vectors / ArrayLists

1.5.1 Implementation

```
ArrayList<Integer> arraylist = new ArrayList<>();
```

1.5.2 Operations

1.6 Hash Tables

1.6.1 Implementation

```
HashMap<Integer, Integer> hashmap = new HashMap<>();
```

1.6.2 Operations

2 Algorithms

2.1 Breadth-First Search

2.2 Depth-First Search

2.3 Binary Search

2.4 Merge Sort

2.5 Quick Sort