

1. What is the process of creating a Min-Heap and Max-Heap in C++?

With the following vector:

```
std::vector<int> values = {30, 10, 20, 50, 40};
```

Produce the max and min-heaps.

Sample Output:

Max-Heap: 50 40 30 20 10

Min-Heap: 10 20 30 40 50

2. How to insert and delete elements from a heap in C++?

3. What types of problems are commonly solved using Binary Search Trees (BST)?

4. How do you implement a B-tree in C++?

5. What are the steps to add elements to a B-tree in C++?

- a. Start from the root.
- b. If root is full, split it and grow the tree in height.
- c. Recursively find the correct child.
- d. If child is full, split it before going down.
- e. Insert key into the correct non-full child.

6. Which techniques are used to remove elements from a B-tree in C++?