1. Do a BFS on the following graph, and in the boxes below write the state of the queue. Do BFS twice. During the first BFS, add neighboring nodes to the queue in their alphabetical order. During the second BFS, add neighboring nodes to the queue in their reverse alphabetical order.

Add neighboring nodes to the queue in their alphabetical order

```
Queue
A B C D E
X X X X X
```

Add neighboring nodes to the queue in their reverse alphabetical order

```
Queue
A C B E D
X X X X X
```
2. Do a DFS on the following graph, and in the boxes below write the state of the stack. Do DFS twice. During the first DFS, add neighboring nodes to the stack in their alphabetical order. During the second DFS, add neighboring nodes to the stack in their reverse alphabetical order.

Add neighboring nodes to the stack in their alphabetical order

\[
\begin{array}{cccccc}
A & B & C & E & D
\end{array}
\]

Add neighboring nodes to the stack in their reverse alphabetical order

\[
\begin{array}{cccccc}
A & C & B & D & E
\end{array}
\]