## **CS401 Lab 6: Queue Data Structure Implementation**

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## 1. Eclipse

```
Fixed Front Queue:
Initial Queue Contents:
1. [Employee Name: John Smith, ID: 1001]
2. [Employee Name: Emma Johnson, ID: 1002]
3. [Employee Name: Michael Brown, ID: 1003]
4. [Employee Name: Sarah Davis, ID: 1004]
5. [Employee Name: David Wilson, ID: 1005]
After dequeuing twice:
1. [Employee Name: Michael Brown, ID: 1003]
2. [Employee Name: Sarah Davis, ID: 1004]
3. [Employee Name: David Wilson, ID: 1005]
Floating Front Queue:
Initial Queue Contents:
Current elements in the queue:
1. [Employee Name: John Smith, ID: 1001]
2. [Employee Name: Emma Johnson, ID: 1002]
3. [Employee Name: Michael Brown, ID: 1003]
4. [Employee Name: Sarah Davis, ID: 1004]
5. [Employee Name: David Wilson, ID: 1005]
After dequeuing twice:
Current elements in the queue:
1. [Employee Name: Michael Brown, ID: 1003]
2. [Employee Name: Sarah Davis, ID: 1004]
3. [Employee Name: David Wilson, ID: 1005]
```

## 2. JAR

```
PS C:\Users\qube2\OneDrive - Illinois Institute of Technology\Documents\Fall 24\CS_401\1023\CS401-lab06_Seonghwan-Lim> java -jar Main.jar Fixed Front Queue:
Initial Queue Contents:
1. [Employee Name: John Smith, ID: 1001]
2. [Employee Name: Emma Johnson, ID: 1002]
3. [Employee Name: Michael Brown, ID: 1003]
4. [Employee Name: Sarah Davis, ID: 1004]
5. [Employee Name: David Wilson, ID: 1005]

After dequeuing twice:
1. [Employee Name: Michael Brown, ID: 1003]
2. [Employee Name: Sarah Davis, ID: 1004]
3. [Employee Name: David Wilson, ID: 1005]

Floating Front Queue:
Initial Queue Contents:
Current elements in the queue:
1. [Employee Name: Sarah Davis, ID: 1001]
2. [Employee Name: Emma Johnson, ID: 1002]
3. [Employee Name: Emma Johnson, ID: 1002]
4. [Employee Name: Emma Johnson, ID: 1003]
4. [Employee Name: David Wilson, ID: 1005]
After dequeuing twice:
Current elements in the queue:
1. [Employee Name: Michael Brown, ID: 1005]
After dequeuing twice:
Current elements in the queue:
1. [Employee Name: Michael Brown, ID: 1003]
3. [Employee Name: Michael Brown, ID: 1003]
4. [Employee Name: Sarah Davis, ID: 1003]
5. [Employee Name: Michael Brown, ID: 1003]
6. [Employee Name: Michael Brown, ID: 1003]
7. [Employee Name: Michael Brown, ID: 1003]
7. [Employee Name: Michael Brown, ID: 1003]
8. [Employee Name: Michael Brown, ID: 1003]
9. [Employee Name: Mame: Michael Brown, ID: 1006]
9. [Employee Name: Michael Brown, ID: 1
```