

Queue Interface

Assignment 1

```
import java.util.ArrayDeque; import
```

```
java.util.Deque; import
```

```
java.util.Iterator;
```

```
class Tester6 {
```

```
    public static Deque<Character> updateStack(Deque<Character> inputStack) {
```

```
        // Create a deque to hold the bottom three elements temporarily
```

```
        Deque<Character> bottomThree = new ArrayDeque<>();
```

```
        // Move the elements from the bottom to the temporary deque for (int i = 0;
```

```
        i < 3; i++) {
```

```
            // Move elements from inputStack to bottomThree
```

```
            bottomThree.addFirst(inputStack.removeLast());
```

```
        }
```

```
        // Add the elements from bottomThree back to the top of inputStack while
```

```
        (!bottomThree.isEmpty()) {
```

```
            inputStack.push(bottomThree.removeFirst());
```

```
        }
```

```
        return inputStack;
```

```
    }
```

```
public static void main(String[] args) {

    Deque<Character> inputStack = new ArrayDeque<Character>();
    inputStack.push('E');
    inputStack.push('D');
    inputStack.push('C');
    inputStack.push('B');
    inputStack.push('A');

    Deque<Character> resultStack = updateStack(inputStack);

    System.out.println("The alphabets in updated stack are:");
    for(Character alphabet: resultStack) {
        System.out.println(alphabet);
    }
}
```

```
The alphabets in updated stack are:
```

```
E
D
C
A
B
```