Queue Interface

Assignment 1

```java
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;

  }
```

```java
    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);

        }

    }

}
```

```
C:\Users\Sarvesh\OneDrive\Desktop>java Tester6
The alphabets in updated stack are:
E
D
C
A
B
```