

# Brendan Whitaker

## CSE 2221 Homework 16

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1. We implement the given static method:

- i. False
- ii. False
- iii. { 'x', 'y', 'z' }
- iv. { 'w', 'x', 'y', 'z' }
- v. { 'x', 'y' }
- vi. { }
- vii. { 'z' }
- viii. { }
- ix. True
- x. False
- xi. 3
- xii. { 'a', 'b', 'c' }

2. Step 1:

CTGTTTTTCGTTA

AGCTGTTTTTCGTT

10 character overlap: CTGTTTTTCGTT

AGCTGTTTTTCGTTA

Step 2:

AGCTGTTTTTCGTTA

TTTCGTTATACAT

8 character overlap: TTTCGTTA  
AGCTGTTTTTCGTTATACAT

Step 3:  
AGCTGTTTTTCGTTATACAT  
CATTTTAGCTGTT  
7 character overlap: AGCTGTT  
CATTTTAGCTGTTTTTCGTTATACAT

Step 4:  
CATTTTAGCTGTTTTTCGTTATACAT  
CACTCCATTTTA  
7 character overlap: CATTTTA  
CACTCCATTTTAGCTGTTTTTCGTTATACAT

Step 5:  
CACTCCATTTTAGCTGTTTTTCGTTATACAT  
TATACAT  
7 character overlap: TATACAT  
CACTCCATTTTAGCTGTTTTTCGTTATACAT

### 3. Instance

```
public void flip() {  
    Queue<Integer> q1 = new Queue1L<Integer>();  
    q1.transferFrom(this);  
    for (int i = 0; i < q1.length(); i++) {  
        int entry = this.dequeue();  
        q1.enqueue(entry);  
    }  
    this.transferFrom(q1);  
}
```

### 4. Static

```
public static void flip(Queue<Integer> q) {  
    Queue<Integer> q1 = new Queue1L<Integer>();  
    q1.transferFrom(q);  
    for (int i = 0; i < q1.length(); i++) {  
        int entry = q.dequeue();  
        q1.enqueue(entry);  
    }  
    q.transferFrom(q1);  
}
```