

# CSC 212 Tutorial #6

## Stack

9/11/2014

**Important:** This tutorial has an online part, which you should complete on the LMS.

### Problem 1

```
public static<T> void replace (Stack<T> st, T x, T y) {
    Stack<T> temp = new Stack<T>();

    while(!st.empty()) {
        T e = st.pop();
        if(e.equals(x))
            e = y;
        temp.push(e);
    }

    while(!temp.empty()) {
        T e = temp.pop();
        st.push(e);
    }
}
```

### Problem 2

```
public static<T> void insertAfter(Stack<T> st, int i, T e) {
    Stack<T> temp = new Stack<T>();
    int c = 0;

    while(!st.empty()) {
        T x = st.pop();
        temp.push(x);
        if(c == i)
            temp.push(e);
        c++;
    }

    while(!temp.empty()) {
        T x = temp.pop();
        st.push(x);
    }
}
```

**Problem 3**

```
public static<T> void removeLast(Stack<T> st) {  
    Stack<T> temp = new Stack<T>();  
  
    while(!st.empty())  
        temp.push(st.pop());  
  
    if(!temp.empty())  
        temp.pop();  
  
    while(!temp.empty())  
        st.push(temp.pop());  
}
```