

CMPT435 Assignment1

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1 Introduction

This is my LaTeX submission for Assignment 1. In it will be snippets of my code along with explanations on some of the parts. There are three classes in my assignment, including Assignment1, which is the main class, stack, and queue.

2 Code

```
import java.io.*;
import java.util.Scanner;
public class Assignment1 {

    public static void main(String[] args) throws Exception{
        String[] list = new String[666];
        Stack myStack = new Stack();
        Queue myQueue = new Queue();
        Scanner input = new Scanner(new File("magicitems.txt"));
        for(int m = 0;m<666;m++) {
            list[m] = input.nextLine();
            System.out.println(list[m]);
        }

        int compare = 0;
        for(int i=0; i<666; i++) {
            for(int j = 0; j<list[i].length();j++) {
                list[i].toLowerCase();
                list[i].trim();
                myQueue.enqueue(list[i]);
                myStack.push(list[i]);
                String queueTemp = myQueue.dequeue();
                String stackTemp = myStack.pop();
            }
        }
    }
}
```

2

```

        }
        top = (top).link;
        return top.data;
    }
}

```

My Stack class includes the main stack functions such as push, pop, and isEmpty.

```

import java.util.*;
public class Queue {
    private ArrayList<String> list = new ArrayList<String>();

    public boolean isEmpty() {
        return list.size() == 0;
    }

    public void enqueue(String item) {
        list.add(item);
    }

    public String dequeue() {
        String item = list.get(1);
        list.remove(0);
        return item;
    }

    public String peek() {
        return list.get(0);
    }

}

```

My Queue class contains the main functions such as queue, dequeue and isEmpty.