

Lab 1

Driver.java:

```
/**
 * File: Driver.java
 * Author: Thompson Rajan
 * Course: MSCS 630
 * Assignment: Lab 1
 * Due Date: Wednesday, January 24, 2018
 * Version: 1.0
 *
 * This file contains the implementation of a pseudo-encryption.
 */

import java.util.Scanner;

/**
 * This class implements a pseudo-encryption. It takes in a plaintext file
 * and maps each character to the set of 0 - 25 numbers, irrespective of their
 * cases. All spaces are mapped to 26.
 */

public class Driver {

    /**
     * This method converts a string into an array of integers which are mapped
     * from (A - Z) or (a - z) to (0 - 25) with spaces mapped to 26.
     * @param s Input string
     * @return returns an array of integers mapped from character strings.
     */
    public static int[] str2int(String s) {

        int[] e = new int[s.length()];
        for (int i = 0; i < s.length(); i++) {

            s = s.toUpperCase();
            char c = s.charAt(i);

            if (c != 32) {
                c -= 65;
                e[i] = (int) c;
            } else
                e[i] = 26;
        }
        return e;
    }

    public static void main(String[] args) {

        Scanner in = new Scanner(System.in);

        while(in.hasNext()){

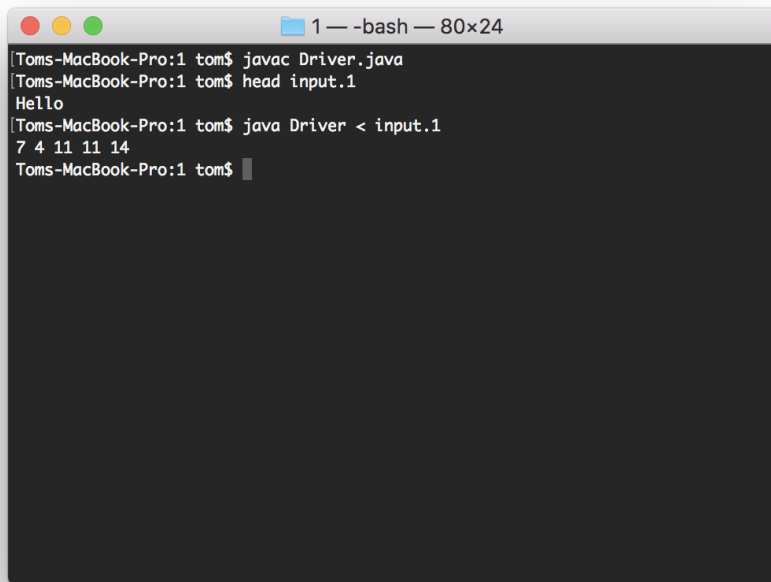
            String s = in.nextLine();

            int[] d = str2int(s);

            for(int i : d){
                System.out.print(i + " ");
            }
        }
    }
}
```

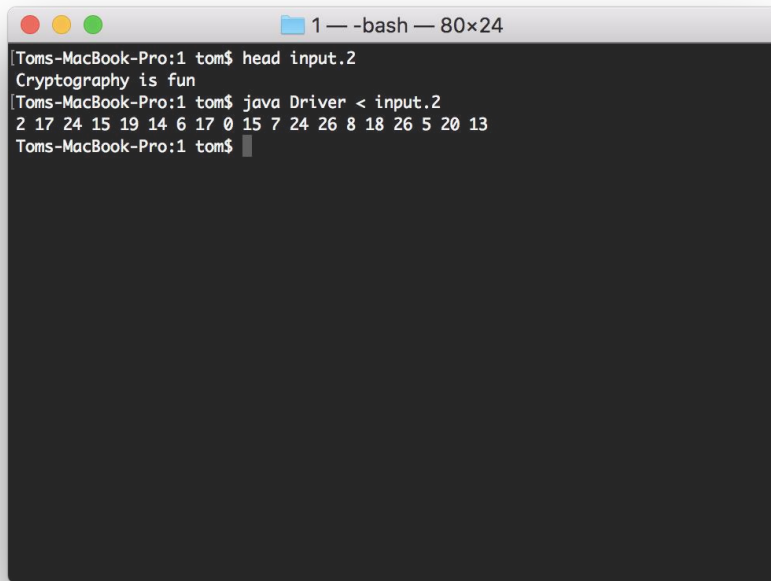
```
    }  
    System.out.println();  
  }  
}
```

Output 1:



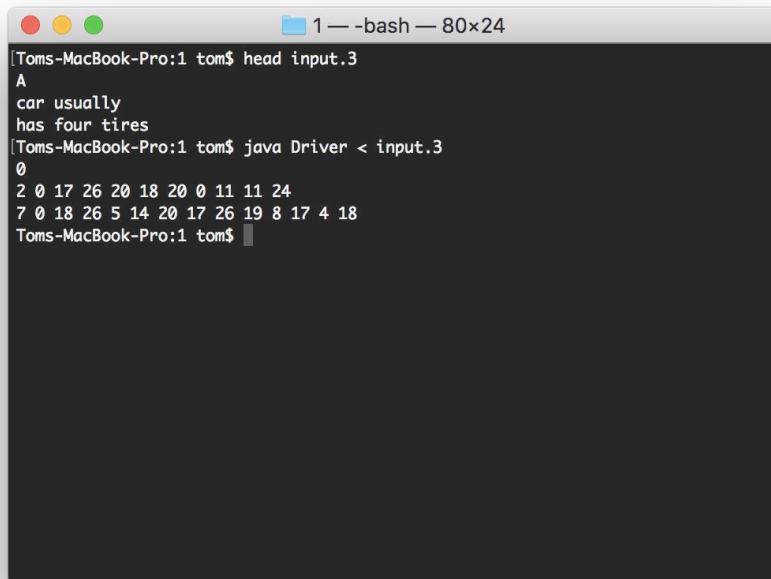
```
1 — -bash — 80x24  
[Toms-MacBook-Pro:1 tom$ javac Driver.java]  
[Toms-MacBook-Pro:1 tom$ head input.1]  
Hello  
[Toms-MacBook-Pro:1 tom$ java Driver < input.1]  
7 4 11 11 14  
Toms-MacBook-Pro:1 tom$
```

Output 2:



```
1 — -bash — 80x24
[Toms-MacBook-Pro:1 tom$ head input.2
Cryptography is fun
[Toms-MacBook-Pro:1 tom$ java Driver < input.2
2 17 24 15 19 14 6 17 0 15 7 24 26 8 18 26 5 20 13
Toms-MacBook-Pro:1 tom$
```

Output 3:



```
1 — -bash — 80x24
[Toms-MacBook-Pro:1 tom$ head input.3
A
car usually
has four tires
[Toms-MacBook-Pro:1 tom$ java Driver < input.3
0
2 0 17 26 20 18 20 0 11 11 24
7 0 18 26 5 14 20 17 26 19 8 17 4 18
Toms-MacBook-Pro:1 tom$
```