CSCI 2114: Tashfeen's Data Structures

Homework 7

Question 1. Solve any fourteen problems over at https://projecteuler.net.

1) Your program should take no more than a minute to solve any given problem. You may use either Java or Python for this. You are only allowed to use the standard libraries in either language.

2) All your programs must compile and run from the command line by either using `javac` and `java` commands, e. g.,

   `javac Tashfeen1.java`

   `java Tashfeen1`

   Or,

   `python3 Tashfeen1.py`

3) You should only have *one file for each problem*. Name each file starting with your last name followed by the problem number. E. g., if I solved the first Project Euler problem, I'll name it `Tashfeen1.java`.

4) Your program should print nothing but the number that solves the problem.

5) Include your answer as a comment at the top of each source file. See listing 1 for an example.

```java
// 233168
public class Tashfeen1 {
    public static void main(String[] args) {
        int sum = 0;
        for (int i = 0; i < 1000; i++)
            if (i % 3 == 0 || i % 5 == 0)
                sum += i;
        System.out.println(sum);
    }
}
```

LISTING 1. A solution to the Project Euler's first problem as an example.
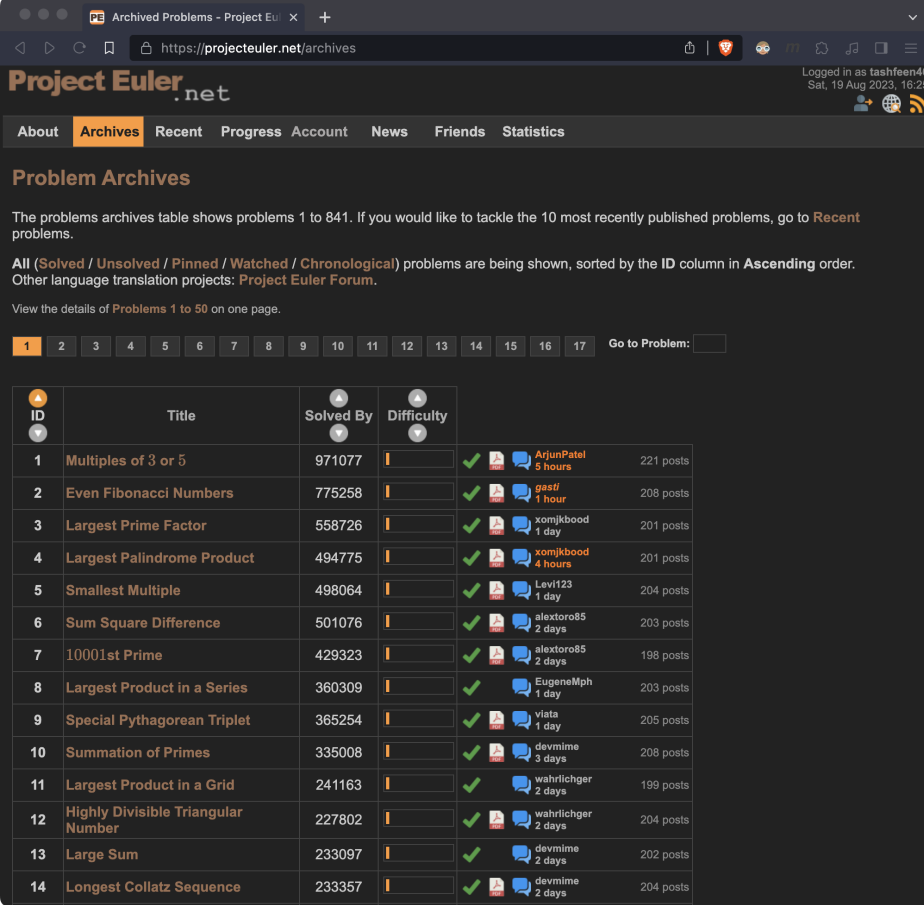
1.1. SUBMISSION INSTRUCTIONS

Please *replace the professor's last name* with yours wherever appropriate.

Setup a GitHub repository by the name `f23csci2114hw7tashfeen` [1]. It should contain,

```
f23csci2114hw7tashfeen
 scTashfeen.png
 Tashfeen1.java
 Tashfeen2.java
 Tashfeen3.java
 Tashfeen4.java
 Tashfeen5.java
 Tashfeen6.java
 Tashfeen7.java
 Tashfeen8.java
 Tashfeen9.java
 Tashfeen10.java
 Tashfeen11.java
 Tashfeen12.java
 Tashfeen13.java
 Tashfeen14.java
```

---

[1]E. g., replace the professor's last name by yours here.

Submit all the files to the online classroom and comment a link to your Github repository. The file called scTashfeen.png is a screenshot showing all the problems you solved on Project Euler and your username. See figure 1 for example.

FIGURE 1. Screenshot of solved project Euler problems and username.

Oklahoma City University, Petree College of Arts & Sciences, Computer Science