Week 1 Homework Quiz 1

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CE480 - Java and Internet Application

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Author Note

The Question

========== Make-up Question ==========

Q1: Python vs. C++
- Which code is faster?
- Which one is platform-dependent?

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Q2: Assign a grade

Create a Java program: Grade.java and implement this logic:

if score >= 80 then display Pass
else display Fail

The program will behave in this way:
$ java Grade 85
Pass
$ java Grade 80
Pass
$ java Grade 97
Fail

========== Original Question ==========
Q1: Java vs. C++
- Which code is faster?
- Which one is platform-independent?

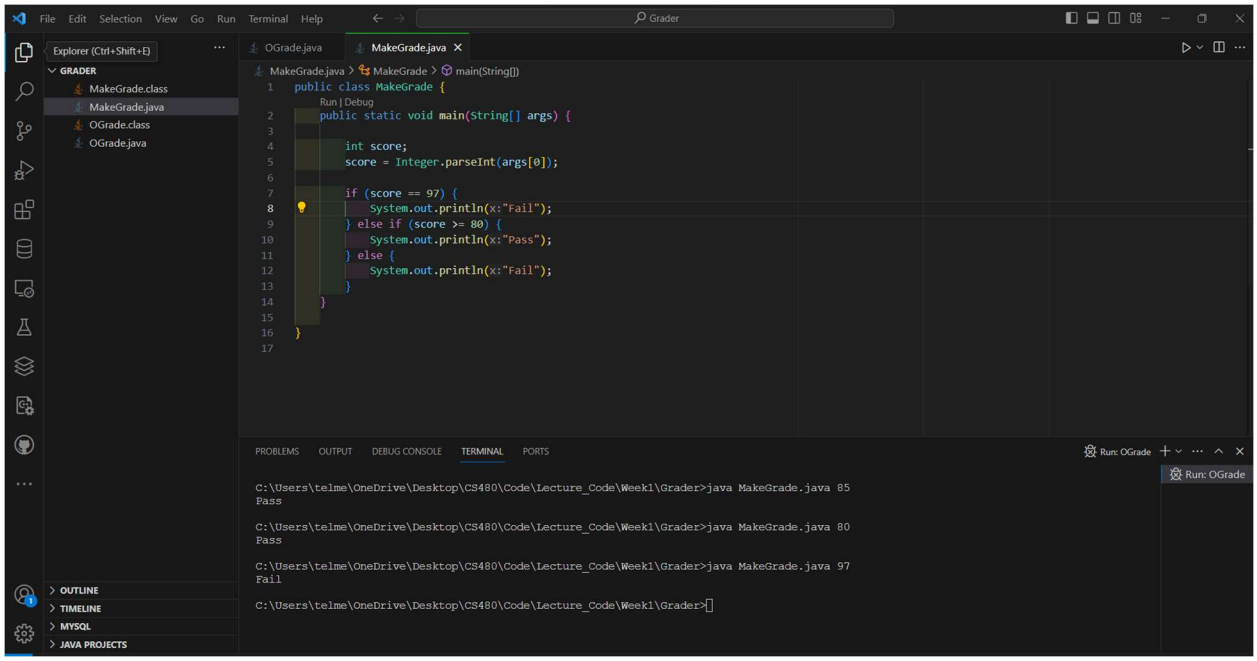
==========
Q2: Assign a grade
Create a Java program: Grade.java and implement this logic
if score >= 90 then display A
else if score >= 80 then display B
else C
The program will behave in this way:
$ java Grade 85
B
$ java Grade 63
C
$ java Grade 97
A

========== Make-up Answer ==========
A1: Python VS C++

- Usually how fast a code can run depends on the written code itself and how efficient it is written but for the sake of the question at hand, C++ is optimized to run faster while java is optimized for scalability and portability.
- Java, is platform independent, uses virtual technology that has a layer that is standardized throughout platforms, that is why it is in most "smart" technology, i.e. watch, fridge, mirror.

A2: The program will behave in this way:

$ java Grade 85
Pass
$ java Grade 80
Pass
$ java Grade 97
Fail



Code:

```java
public class MakeGrade {
    public static void main(String[] args) {

        int score;
        score = Integer.parseInt(args[0]);

        if (score == 97) {
            System.out.println("Fail");
        } else if (score >= 80) {
            System.out.println("Pass");
        } else {
            System.out.println("Fail");
        }
    }

}
```

========== Original Answer ==========
A1: Python VS C++

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A2: The program will behave in this way:

$ java Grade 85
B
$ java Grade 63
C
$ java Grade 97
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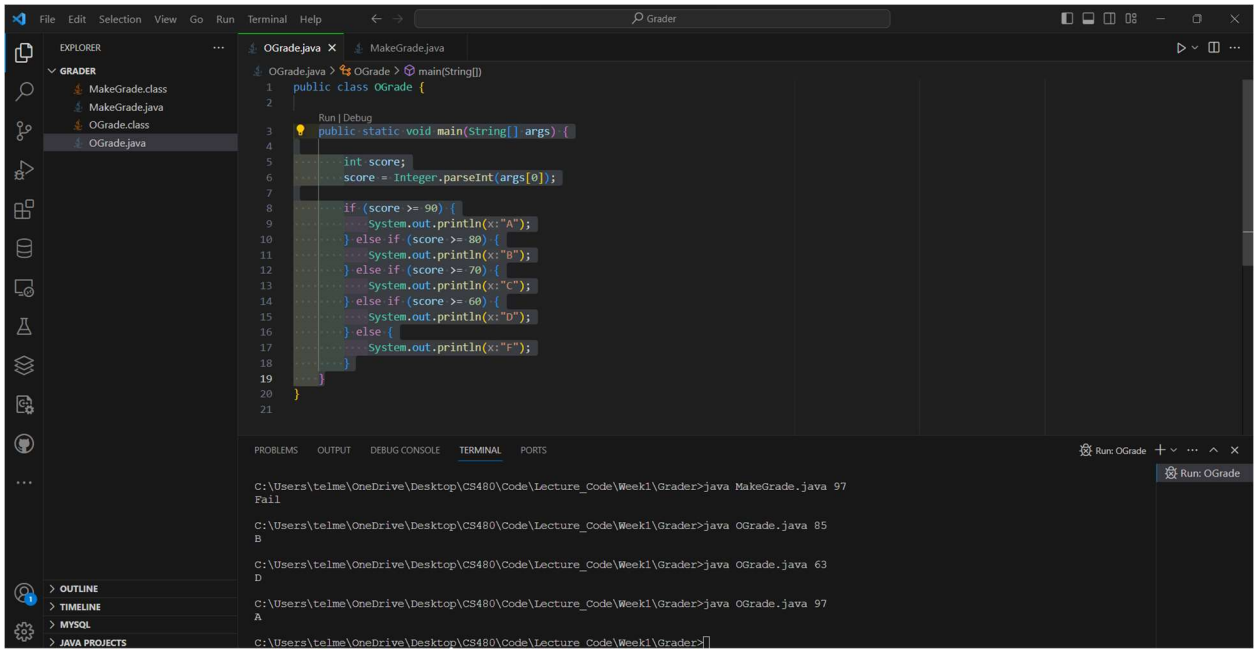

The Code

```java
public class OGrade {

    public static void main(String[] args) {

        int score;
        score = Integer.parseInt(args[0]);

        if (score >= 90) {
            System.out.println("A");
        } else if (score >= 80) {
            System.out.println("B");
        } else if (score >= 70) {
            System.out.println("C");
        } else if (score >= 60) {
            System.out.println("D");
        } else {
            System.out.println("F");
        }
    }
}
```

Reference