Names: _____

Swift: Constants / Variables, Types, and Printing - Group Assignment

Part 1: Modify Existing Code

Below is some existing code. First, read it until you understand what it does and how it works, or you at least have a good guess. Then, modify the code so that if the discriminant is less than 0, instead of printing "Error", it should print "There are no real roots, but the discriminant = <discriminant value here>".

```
import Foundation

print("Input a, then b, then c for the quadratic")
let a: Double = Double(readLine()!)!
let b: Double = Double(readLine()!)!
let c: Double = Double(readLine()!)!

let discriminant = b*b - 4*a*c

if discriminant >= 0 {
     let x1 = (-b + sqrt(discriminant))/(2*a)
     let x2 = (-b - sqrt(discriminant))/(2*a)
     print("The roots are:")
     print(x1)
     print(x2)
}

if discriminant < 0 {
     print("Error")
}
```

Part 2: Convert Fahrenheit to Celsius and Kelvin

Your program will read in a single Fahrenheit value, and output it in Celsius and Kelvin. The input is just the number itself. The output should have **only** the Celsius value on the first line, and **only** the Kelvin value on the second line. Do not output any other descriptive text. In addition, you should **round** both the Celsius and Kelvin values **down**.

Example Input:

```
56.8
```

Example Output:

```
13
286
```

Here is some starting code for you, which reads in the Fahrenheit value:

```
let fahrenheit = Double(readLine()!)!
```