CS-200: Programming I
Fall 2017
Northeastern Illinois University
PLTL: Week of 11/14/17
Selection Statements/Math

Practice Problem #1

- Write a program that has the class name `CheckIfSame` and that has the `main` method.
- The program should ask the user to enter two integers.
- The program should determine whether the two integers have have the same quotient when divided by 10 and check if the same two integers are divisible by ten.
- If they have the same quotient print out `The quotients are the same!`.
- If they are both divisible by 10, print out `They are both divisible by ten!`.
- The pogram should then check if the two integers are either divisble by 10 or have the same quotient when divided by 10. If they do, print out `Either quotient or remainder are the same!`.
- If the two integers are both divisible by 10 and have the same quotient, then check if both quotients are divisible by 2. If they are print `The quotient is divisible by two!`. If they are not, print `The quotient is not divisible by 2.`.
- If they don't have the same quotient and are not divisible by 10 then print `Nothing is the same!`.
- Several sample runs are provided for you below. Format your output to match the sample output.

```
First number: 10
Second number: 10
The quotients are the same!
They are both divisible by ten!
The quotient is not divisible by 2.
```

```
First number: 3
Second number: 5
The quotients are the same!
Either quotient or remainder are the same!
```

Practice Problem #2

- Write a program that has the class name `MaxMinMax` and that has the `main` method.
- The program should take the absolute value of the integers.
- The program should check which absolute value is larger and then display that value accordingly (see output). If they are equal the program should print that they are equal.
- Use the following equation to print a new maximum value (see output): Max^{Min}, Min^{Max}
- Several sample runs are provided for you below. Format your output to match the sample output.

```
Enter n1: 2.0
Enter n2: 2.0
Their values are equal.
```

```
Enter n1: 2.0
Enter n2: 4.0
Absolute value of 4.0 is greater than 2.0
The new max is: 16.0
```

```
Enter n1: 10.0
Enter n2: 5.0
Absolute value of 10.0 is greater than 5.0
The new Max is: 9765625.0
```