CS-200: Programming I
Fall 2017
Northeastern Illinois University
PLTL: Week of 01/30/17
Selection Statements/Methods

Practice Problem #1

- Write a program that has the class name `Problem1` and that has the `main` method.
- Write a second method named `SumProduct` that takes two integer parameters, `a` and `b` and return a String.
- The method should calculate the sum and the product of `a` and `b`. If sum is greater than product, program should return `Sum`. Similarly, if the product is greater than sum, it should return `Product`. And if the Sum and Product are same, then return `Tie`. In all the cases, the program should display `Awesome` if the sum and product are both divisible by 8.
- Several sample method calls are provided for you below. You should test your method inside the `main` method.

Sample Method Usage	return
`SumProduct(5, 1)`	`Sum`
`SumProduct(64, 32)`	`Awesome`
`SumProduct(8, 7)`	`Product`
`SumProduct(2, 2)`	`Tie`

Practice Problem #2

- Write a program that has the class name `Problem2` and that has the `main` method.
- Write a second method named `GetRandomNumber` that takes no parameters, and returns a random integer between 0 to 100.
- Write a second method called `WeatherCheck` that accepts string `season` and an integer `temp` and returns a String.
- You should pass the value returned by `GetRandomNumber` as an integer parameter when you are calling `WeatherCheck`.
- Check if the season is Fall and if:
  temp is between 0-30 return `It's cold for a fall.`
  temp is between 30-60 return `It's a normal temperature for fall.`
  temp is more than 60 return `It's hot.  I cannot believe it is fall.`

- Check if the season is Winter and if:
  temp is between 0-30 return `It's normal temperature for winter.`
  temp is between 30-60 return `It's warm.  Very nice weather.`
  temp is more than 60 return `It's super-hot for winter.  Do you even live in Chicago?`

- Check if the season is Spring and if:
  temp is between 0-30 return `It's cold for a spring`.
  temp is between 30-60 return `It's a normal temperature for spring`.
  temp is more than 60 return `It's hot.  It appears that summer is already here.`

- Check if the season is Summer and if:
  temp is between 0-30 return `It's too cold for summer.  Well well, here is Chicago for you`.
  temp is between 30-60 return `It's cold.  Is it summer yet`?
  temp is more than 60 return `It's so nice.  I love summer`.

- Several sample runs are provided for you below. Your output must be formatted **exactly** like the sample runs below. Note that while your output must be formatted as below, you will not get the same results as this uses random numbers.

Sample Method Usage	return
`WeatherCheck(Winter, 72)`	`It's super-hot for winter.  Do you even live in Chicago?`
`WeatherCheck(Spring, 35)`	`It's cold for a spring.`
`WeatherCheck(Fall, 68)`	`It's hot.  I cannot believe it's fall.`
`WeatherCheck(Summer, 59)`	`It's cold.  Is it summer yet?`