

**CS-200: Programming I**  
**Fall 2017**  
**Northeastern Illinois University**  
**PLTL: Week of 09/18/17**  
**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 a 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 a normal temperature for spring.
WeatherCheck(Fall, 68)	It's hot. I cannot believe it is fall.
WeatherCheck(Summer, 59)	It's cold. Is it summer yet?