**Logical Problems**

1. Create a multiplication table.
2. You are driving a little too fast, and a police officer stops you. Write code to compile the fine you would have to pay.

* If your speed is 60 or less, the result is 0 since there is no fine.
* If speed is between 61 and 80 inclusive, then fine 100 rupee
* If speed is above 81 or more, then fine is 200 rupees
* Unless it is a holiday on that day, your speed can be 5 higher in all cases.

1. Given 3 ints a,b,c return true if it is possible to add two of the int to get the 3rd. There should only a single line of code in the method body.
2. The birds in florida like to sing during favorable temperatures. In particular, they sing if the temperature is between 60 and 90. Unless it is summer, then  the upper limit is 100 instead of 90. Given an int temperature and a boolean isSumer, return true if the birds are singing and false otherwise.
3. Given 3 ints 1,2,4 return true if 2nd is greater than 1st and 3rd is greater than 2nd . however, with the exception that if the parameter “itsOk” is true. 2nd does not need to be greater than 1st but still be less than 3rd.
4. We’ll say a number is cool if it’s a multiple of 11 or if it is one more than a multiple of 11, return true if the given non-negative number is cool. Use the % “modulus” operator.
5. Given an int n, return the string form of the number followed by “!” so if the int is for example 13 this method should return “ 13! ” however the catch is that if the number is divisible by 3 the method should return  “Fizz” instead of the number, and if divisible by 5 it should return “Buzz” and if divisible by both 3 and 5 use “FizzBuzz”.
6. Given 3 int argument a,b,c return their sum, however if one of the argument is the same as any of the other ones, that number should not count towards the sum. So basically you only sum unique number.
7. Given 2 positive int argument (a,b) return whichever argument is nearest to the number 21 without going over. Return 0 if they both go over 21.
8. Given 3 int argument a,b,c return their sum, however if one of the argument is 13 then it does not count towards the sum and argument to its right do not count either.
9. Given a string, return a string where for every char in the original, append another.
10. Return a version of the given string, where for every star (\*) in the string the star and the chars immediately to its left and right are gone eg “ab\*cd” yields “ad”.
11. Given an array of strings, return the count of the number of strings with the given length. Eg wordsCount({“a”,”bb”,”b”,”ccc”}, 1) => 2.
12. Given 2 array that are the same length containing strings, compare the 1st string in one array to the 1st string in the other array, the 2nd to the 2nd and so on. Count the number of times that the 2 strings are non-empty and start with the same char. The string may be any length.
13. Given a string, return the length of the largest streak of the same chars in a string.