CTA - Week 3 - Practice Homework

Work these out on paper, if you want you can then program an implementation. Doubtless the answers exist on-line so if you don't want to learn you can Google them but then you will never learn how to think like a programmer and that will be very sad. These are solvable given the techniques covered already: loops, conditions, variables, modulus operator etc.

- 1. Write an algorithm that returns the largest element in an array. Assume the array is unsorted.
- 2. Write an algorithm that returns a new array which is the reverse of the input.
- 3. Write an algorithm that checks whether an element occurs in an array.
- 4. Write an algorithm that returns the elements on odd positions in an array.
- 5. Write an algorithm that computes the running total of an array of numbers.
- 6. Write an algorithm that prints a multiplication table for numbers up to 12.
- 7. Write an algorithm that prints the first 100 prime numbers.
- 8. Write an algorithm that prints the numbers from 1 to 100 and for multiples of '3' print "Fizz" instead of the number and for the multiples of '5' print "Buzz".