Day 3: Functions

Problem 1. Write a function that takes a string and prints out "Welcome to PWSAfrica" and the string.

Problem 2. Write a function that takes a number and prints out the square of that number

Problem 3. Write a function that takes a string and prints it out twice.

Problem 4. Write a function that takes a string and prints it out 10 times.

Problem 5. Write a function that prints out "Happy Birthday" and the input string.

Problem 6. Write a function that takes 2 numbers and returns first number to the power of second.

Problem 7. Write a function that takes a string and prints the reverse.

Problem 8. Write a function that takes an exam score and tells the person whether they've passed or failed.

Problem 9. Write a function that counts the number of vowels in a string.

Problem 10. Write a function that takes two numbers and returns whether the second is a factor of the first.

Problem 11. At normal atmospheric pressure, water changes state to a solid at $0C$ or below and a gas at $100C$ or above. It remains a liquid at any other temperature.
   Write a function that will return "solid", "liquid" or "gas" to the user depending on the temperature they enter.

Problem 12. Write a function that takes a list and returns the sum of the elements of the lsit.

Problem 13. Write a function that takes list as an argument and returns the max of this list.

Problem 14. Given a string and a character, write a function that returns how many times the character appears in the string.

Problem 15. Write a function that takes two lists and returns sum of elements pairwise.

Problem 16. Write a function that takes a month and returns what season it is.

Problem 17. Write a function that takes two lists and returns the values that are not in the second list, stored in a new list.

Problem 18. Using the function you wrote in the previous problem, return a list that only contains values that appear in one list.

Problem 19. Write a function that removes duplicates from a list.

Problem 20. Given 2 lists, find their intersection.