Vector Practice

- Create a vector to hold 40 names of students.
- Initialize a vector called "grades" to the value: 100

• Compute the average of an entire vector of doubles.

• Create a vector with 20 strings. Allow the user to input this vector. Randomly choose two elements from the vector. Output their concatenation.

• Given a vector named fairies. Randomly choose two elements from the vector and output their sum.

• Show how to output every other element of a vector called numbers.

• Show how to fill a vector of 30 integers with only even numbers.

• Show how to fill a vector of 30 integers with random numbers from 1-10.

• Show how to take a vector and sum all of its elements.

• Show how to take a vector of doubles and increase every value by 10.

• Show how to take a vector of doubles and replace each item with its value squared.

• Show how to take a vector of doubles and replace each item with its square root.

• Show how to rotate a vector such that the second becomes first, the third becomes second and so on. The first element should be placed in the last slot. Assume this is a vector of doubles (although the same logic should work for any vector)

• Show how to rotate a vector such that the first becomes second, the second becomes third and so on. The last element should be placed in the first slot. Assume this is a vector of strings (although the same logic should work for any vector)