Set Exercises

1. Using the two .txt files you already have (or make them again), prime and happy. These are all of the <u>Prime</u> and <u>Happy</u> numbers under 1000 (<u>Happy numbers</u> <u>explained</u>). Read from those files and use set comprehension to fill to sets. Use these sets and set methods to determine the values that are both Prime and Happy.

The top 1000 girl names from <u>1880</u>, <u>1950</u>, <u>2016</u>, and <u>2017</u> can be found in those text files.

- 2. Write a function that takes two files of baby names and returns the number of unique names. Load the names into sets (use set comprehension). Use it to determine the following:
 - a. Find how many unique names there are between 1880 and 2017
 - b. Find how many unique names there are between 2016 and 2017
- 3. What names does 1880 have in common with 2017
- 4. How many more babies were born in 2017 than 1880?