CS 375 - UNIX System Programming
Homework 2

Fun with **`grep`** and **`find`**. **Store your answers in a textfile, and submit it via email to richardson.tony@gmail.com**.

1. Write a **`grep`** command that will match all words in a file that have at least one 'a'.
2. Write a **`grep`** command that will match all words in a file that have exactly one 'a'.
3. Write a single command line using only **`grep`** (perhaps multiple times) that will match all words in a file containing at least one occurrence of the vowels 'a', 'e', 'i', 'o', and 'u', in any order. E.g., unquestionable.
4. Write a single command line using only **`grep`** (perhaps multiple times) that will find all the words in a file containing at least one occurrence of the vowels 'a', 'e', 'i', 'o', and 'u', appearing in that order. E.g., unfacetious.
5. Write a single command line using only **`grep`** (perhaps multiple times) that will find all the words in a file containing exactly one occurrence of the vowels 'a', 'e', 'i', 'o', and 'u', in any order. E.g., unsportsmanlike.
6. Write a single command line using only **`grep`** (perhaps multiple times) that will find all the words in a file containing exactly one occurrence of the vowels 'a', 'e', 'i', 'o', and 'u', in that order. E.g., facetious.
7. Write a **`find`** command that will list all the files in your *current* directory (and its subdirectories) with the '.o' extension.
8. Write a **`find`** command that will list all the files in your *current* directory (and its subdirectories) that are larger than 50KB in size.
9. Write a **`find`** command that will list all the files in your *home* directory that are larger than 50 KB with the '.o' extension
10. Write a **`find`** command that will delete all the '.o' files that are larger than 50 KB in your *home* directory (and its subdirectories) that were accessed last more than 7 days ago.

Notes:

1. You should assume that the **`grep`** commands are used on a file with one word on each line all in lowercase. You can test your commands using **`/usr/share/dict/words`** on a Linux box (after you test it on a much smaller file).
2. You can use

   ```
   dd if=/dev/urandom of=<filename>.o bs=1k count=<numBlocks>
   ```

   to create random '.o' files. You can modify access times with the **`touch`** command (see man page on how to change times other than modification time).