

Exercise 12: Practice, practice, practice

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This exercise is to build up your stamina. Throughout the previous exercise you must have grasped a lot of python symbols and syntax, but practice makes a man perfect. So, do the following two exercises. I am assuming that you should not face much problems now as you had faced earlier. So, let's get started.

Exercise 1: Practice 1

1. Create a file called **ex12_1.py** and write the following code in it.

```
print "Let's practice everything."
print 'You\'d need to know \'bout escapes with \\ that do \n newlines
and \t tabs.'
```

```
poem = """
\tThe lovely world
with logic so firmly planted
cannot discern \n the needs of love
nor comprehend passion from intuition
and requires an explanation
\n\t\twhere there is none.
"""

print "- - - - -"
print poem
print "- - - - -"
five = 10 - 2 + 3 - 6
print "This should be five: %s" % five

def secret_formula(started):
    jelly_beans = started * 500
    jars = jelly_beans / 1000
    crates = jars / 100
    return jelly_beans, jars, crates

start_point = 10000
beans, jars, crates = secret_formula(start_point)
print "With a starting point of: %d" % start_point
print "We'd have %d beans, %d jars, and %d crates." % (beans, jars,
crates)
start_point = start_point / 10
print "We can also do that this way:"
print "We'd have %d beans, %d jars, and %d crates." %
secret_formula(start_point)
```

2. Put your comments wherever necessary

3. Break the file on purpose, then run it to see what kinds of errors you get. Make sure you can fix it.

Exercise 2: Practice 2

1. Create a file called **ex12_2.py** and write the following code in it.

```

def break_words(stuff):
    """This function will break up words for us."""
    words = stuff.split(' ')
    return words

def sort_words(words):
    """Sorts the words."""
    return sorted(words)

def print_first_word(words):
    """Prints the first word after popping it off."""
    word = words.pop(0)
    print word

def print_last_word(words):
    """Prints the last word after popping it off."""
    word = words.pop(- 1)
    print word

def sort_sentence(sentence):
    """Takes in a full sentence and returns the sorted words."""
    words = break_words(sentence)
    return sort_words(words)

def print_first_and_last(sentence):
    """Prints the first and last words of the sentence."""
    words = break_words(sentence)
    print_first_word(words)
    print_last_word(words)

def print_first_and_last_sorted(sentence):
    """Sorts the words then prints the first and last one."""
    words = sort_sentence(sentence)
    print_first_word(words)
    print_last_word(words)

```

This exercise is a little different. You will not be running the code, instead you will be importing this file in your python command prompt and accessing the various functions that you have created in the file. A simple example will be as follows. Remember to use the file in python command line interpreter only.

```

>>> import ex12_2
>>> sentence = "All good things come to those who wait."
>>> words = ex25.break_words(sentence)

```

2. Play around with the different functions and understand how you can create your own python scripts with different functions and can simply import them in another python file or in the command line interpreter. Write a document stating how things are working in this exercise.