Lab 10 – CSE 101 (Spring 2019)

1. Objectives

The primary objectives of this lab assignment are to revise Python regular expressions.

2. Python regular expressions

Regular expressions are used to identify whether a pattern exists in a given sequence of characters (string) or not. Visit the following link that explains how to use regular expressions in Python.

https://www.programiz.com/python-programming/regex

3. Practice problems

Create a Python file `regexpractice.py` and write the following functions:

1. Write a Python function `text_match` to find sequences of lowercase letters joined with a underscore.

```
>>>print(text_match("aab_cbbbc"))
Found a match!!
>>>print(text_match("aab_Abbbc"))
Not matched!
>>>print(text_match("Aaab_abbbc"))
Not matched!
```

2. Write a Python function `text_match1` that matches a string that has an 'a' followed by anything, ending in 'b'.

```
>>>print(text_match1("aabbbbd"))
Not matched!
>>>print(text_match1("aabAbbbc"))
Not matched!
>>>print(text_match1("accddbbjjjb"))
Found a match!
```

3. Write a Python function `modify_ip` to remove leading zeros from an IP address.

```
>>>print(modify_ip("216.08.094.196"))
```

```
216.8.94.196
```

4. Write a Python function `search_literals` to search some literals strings in a string.

```
>>>text = 'The quick brown fox jumps over the lazy dog.'
>>>literals = 'fox', 'dog', 'horse'
>>>search_literals(text, literals)
Searching for "fox" in "The quick brown fox jumps over the lazy
dog." ->
Matched!
Searching for "dog" in "The quick brown fox jumps over the lazy
dog." ->
Matched!
Searching for "horse" in "The quick brown fox jumps over the lazy
dog." ->
Not Matched!
```

5. Write a Python function `number_search` to search the numbers (0-9) of length between 1 to 3 in a given string.

```
>>>text = "Exercises number 1, 12, 13, 345 and 4556 are important"
>>>number_search(text)
Number of length 1 to 3
1
12
13
345
455
6
```

See following link for more practice problems:

https://www.w3resource.com/python-exercises/re/#EDITOR

5. Submission

Submit completed `polarcoord.py` program on blackboard.