Worksheet: More final exam review

COSC 101, 2018-05-04

Complete problems 3 and 4 from Wednesday’s worksheet

5) Strings and conditionals
   a) Write a function called remove_digits that takes a string as a parameter and returns a version of the string without any digits.

   b) Write a function called contains that takes a string (to_search) and a list of strings (to_find) as parameters and returns the first string in to_find that also appears in to_search. If no strings in to_find appears in to_search, then return None.

   c) Write a function called splice that takes two strings (str1 and str2) and an integer (index) as a parameter and returns a new string with str2 inserted into str1 at index. For example, split("abcd", "ef", 2) should return "abefcd". If index is less than zero, str2 should be put at the front of str1; if index is greater than the length of str1, then str2 should be put at the end of str1.
d) Write a function called convert that takes a string as a parameter and converts the string to the appropriate type. For example, convert("123") should return the integer 123, convert("4.5") should return the float 4.5, convert("True") should return the boolean True, and convert("9.0a") should return the string "9.0a".

e) Write a function called get_choice that takes a list of options (e.g., yes, no, maybe) and asks the user to choose one of the options by entering the first letter of the options. You may assume every option starts with a different letter. Your function should accept lower and uppercase letters. The function should return the chosen option (the full word, not just the first letter). If the user enters an invalid option, then the function should again ask the user to choose an option. For example:

```python
>>> get_choice(['yes', 'no', 'maybe'])
Yes, No, Maybe? X
Yes, No, Maybe? y
yes
```