Before next lesson, upload this lab to the learning hub at learn.bcit.ca in the /Activities/Assignments/Lab9 dropbox.

A sample solution will be posted at the start of the next lesson, so late submissions are not accepted.

Write a python script with the following functions that use regular expressions created by you:

| **Function name** | **Returns True if the parameter matches this pattern** |
| --- | --- |
| is\_valid\_bc\_license\_plate | Six characters total:  three letters then three digits, or  three digits then three letters, or  two letters, digit, space or hyphen, two digits, letter  All letters are UPPERCASE  **Example matches:**  ABC123  123ABC  AB1 23C  AB1-23C |
| is\_valid\_python\_variable\_name | Between one and 32 characters total:  all characters must be lowercase letters or underscores, but not more than one underscore in a row  **Example matches:**  first\_name  x  a\_good\_variable\_name |
| is\_valid\_email\_address  HINT: break down the parameter as follows:  def isValidEmailAddress(email):  email\_data = re.split('@', email)  username = email\_data[0]  domain\_data = re.split('[.]', email\_data[1])  domain\_name = domain\_data[0]  top\_level\_domain = domain\_data[1] | Username followed by @ followed by domain name followed by period followed by top-level-domain.  Username rules: letters (upper or lower case) and underscores (as long as \_ is neither the first nor last character): between 1 and 256 characters total  Domain name rules: letters (upper or lower case) between 1 and 32 characters total  Top-level-domain rules: letters (upper or lower case) between 2 and 5 characters total.  **Example matches:**  Jason\_Harrison@bcit.ca  a\_\_\_\_\_b@c.com |
| is\_valid\_human\_height | Number of feet, apostrophe, number of inches, double quotation mark.  The number of feet must be 2-8 inclusive.  The number of inches must be 0-11 inclusive.  The number of inches between 0 and 9 may have an optional leading zero (e.g. 5’08” or 5’8”)  The shortest height is 2’1” (not 2’0”) and the tallest height is 8’11”  Note: instead of double quotation marks for inches, you can accept the word “in” instead.  **Example matches:**  2’01”  2’1”  5’09”  6’2in  4’10in  6’2”  8’11” |