

## CS 313: Data Science Lab – I (Python/R)

### Assignment-2

**Submission Deadline: 28-09-2020 11:59 PM**

1. Create a dictionary and save 20 elements in the form (x, x\*x) where x begins from 1 and ends at 20.
2. Using the dictionary created in question 1, print the sum of values in the dictionary, the maximum of the values in the dictionary, and the minimum of the values in the dictionary.
3. Take user inputs to a dictionary as long as the user wants. Once done, remove all the keys that have duplicated values (in case of duplicated keys, python simply overwrites the value of the older key with the value of the just inputted key if both the keys are same).
4. Take user inputs to a dictionary as long as the user wants. Once done, print all the unique values in the dictionary.
5. Input keys and values in the form: {1:['a' , 'b' ], , 2: ['c', 'd'] }. Your code should output the Cartesian product of the values of the dictionary (removing extraneous characters like the apostrophe). For instance, Cartesian product: ac, ad, bc, bd.

### Solve the following experiments using dictionary

6. Input two strings and check if they are anagram strings (i.e. having the same number of each character in the alphabet, like root and troo are anagram since they both have 1 t, 2 o, and 1 r).
7. Input a string and print the first non-repeated character in the string.
8. Input a string and print all the repeated words in the string.
9. Input a string and print the frequency of the words in the string.