ED5340:Data Science: Theory and practice

LAB 3 - PART2: LISTS, SET AND TUPLE

✔ Done

Opened: Wednesday, 7 February 2024, 12:00 AM
Due: Saturday, 10 February 2024, 11:59 PM

6. List comprehension : Given two lists of equal length, list1 contains the integers and list2 contains alphabets. Using list comprehension, WAP

a) To generate a list containing the squares of elements from list1.

b) To generate a list containing pairwise corresponding elements in the form of tuple.

c) To generate a list containing all possible combinations of elements from the two lists.

d) To generate a list containing elements of list1 and list2 alternatively.

Example:

Input:

list1 = [1,2]   list2 = ['a','b']

Output:

a) [1, 4]

b) [(1,'a'), (2,'b')]

c) [(1,'a'),(1,'b'),(2,'a'), (2,'b')]

d) [1,'a',2,'b']

7. Find out the applicable methods for the list but not tuples. List them out.

8. Write a code snippet in Python that takes a string as input and returns a tuple of tuples. Each inner tuple should contain a character from the input string and its corresponding ASCII value.

Sample example: Input_string = "Design", Output_tuple = (('D', 68), ('e', 101), ('s', 115), ('i', 105), ('g', 103),('n', 110))

9. Create a program that takes a list of tuples containing student name and roll number and returns a new list of tuples containing only those tuples whose first element is a vowel (a, e, i, o, u, A, E, I, O, U).

Sample example: list_of_tuples = [("aditi", 1), ("tanya", 2)], Output_list_of_tuples = [("aditi", 1)]

10. Create a set of all numbers between 1 and 20 that are either divisible by 3 or 5, using set comprehension.

11. What is a frozenset()? Give examples.

Edit submission   Remove submission

Submission status

Submission status	Submitted for grading
Grading status	Graded
Time remaining	Assignment was submitted 10 hours 2 mins early
Last modified	Saturday, 10 February 2024, 1:56 PM
File submissions	AM23M022_LAB3_07_02_2024_descriptive.pdf 10 February 2024, 1:56 PM AM23M022_LAB3B_07_02_2024.py 10 February 2024, 1:34 PM
Submission comments	▸ Comments (0)

Feedback

Grade	10.00 / 10.00
Graded on	Monday, 3 June 2024, 8:50 AM
Graded by	eM ed19b019 MISHMA MARIYAM RAJU

◄ LAB 3 PART 1: LIST, SET AND TUPLE

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