Hands-On Prerequisite Python in AI

Exercises 09 & 10

Deadline: 2023 17 May
Score: 700

2023 9 May

Hands-On Prerequisite Python in AI

Exercises 09

Score: 550

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Question 1 (Tuple)

Based on some examples (code), show the difference between list and tuple,

Question 2 (Tuple)

1. Create an empty tuple.
2. Create a tuple with one item.
3. Create a tuple with more than one item.
4. Concatenate two tuples of Part2 and Part3.
5. Check 1 is in tuple of Part4 or no.

Question 3 (Tuple)

Answer the questions according to the list below.

numbers = (10, 20, 30, 5, 40, 20, 4, 2, 1,8, 80)

1. Add 100 at the end of tuple.
2. Add 50 in the index of 3.
3. Remove 30 from tuple.
4. Edit 10 with 110.
5. Sort the tuple.

Question 4 (Tuple)

Write a python program that takes a list of tuple and display other list that only have first and last items of each tuple.

Input:[(1, 2, 3), (3, 5, 6), (4, 10, 12)]

Output: [(1, 3), (3, 6), (4, 12)]

Question 5 (Set)

Generate 10 different random numbers between 100 and two 200.

Question 6 (Set)

Create two lists, then create a third list that contains values that are in the first list but not in the second list.

Question 7 (Tuple & Set)

Find two new methods for Tuple and Set.

Question 1 (Recursive Function)

Write a recursive function for the binary search algorithm.

Thanks

Good Luck!