

Python

Assignment Questions

Assignment

Q1. What are the characteristics of the tuples? Is tuple immutable?

Q2. What are the two tuple methods in python? Give an example of each method. Give a reason why tuples have only two in-built methods as compared to Lists.

Q3. Which collection datatypes in python do not allow duplicate items? Write a code using a set to remove duplicates from the given list.

```
List = [1, 1, 1, 2, 1, 3, 1, 4, 2, 1, 2, 2, 2, 3, 2, 4, 3, 1, 3, 2, 3, 3, 3, 4, 4, 1, 4, 2, 4, 3, 4, 4]
```

Q4. Explain the difference between the union() and update() methods for a set. Give an example of each method.

Q5. What is a dictionary? Give an example. Also, state whether a dictionary is ordered or unordered.

Q6. Can we create a nested dictionary? If so, please give an example by creating a simple one-level nested dictionary.

Q7. Using setdefault() method, create key named topics in the given dictionary and also add the value of the key as this list ['Python', 'Machine Learning', 'Deep Learning']

```
dict1 = {'language': 'Python', 'course': 'Data Science Masters'}
```

Q8. What are the three view objects in dictionaries? Use the three in-built methods in python to display these three view objects for the given dictionary.

```
dict1 = {'Sport': 'Cricket', 'Teams': ['India', 'Australia', 'England', 'South Africa', 'Sri Lanka', 'New Zealand']}
```

