Untitled

April 3, 2023

1 1. what are the characteristics of tuples ? are tuples immutable?

1.0.1 tuples are immutable

1.0.2 tuples has two major functions INDEX and COUNT

1.0.3 tuples can be sliced

1.0.4 tuples are represented in()

1.0.5 tuples can be concatinated

1.0.6 yes tuples are immmutable

[ ]:

2 2question

[ ]:

2.0.1 tuples have only two functions 1.COUNT and 2.INDEX

2.0.2 eg of count

```
[10]: t1=(1,2,3,4,5,6,7,"punith",True,False)
```

```
[11]: t1.count(0)
```

```
[11]: 1
```

```
[12]: t1.count(1)
```

```
[12]: 2
```

```
[13]: ## count is the operation done to count the num,char,bool
```

2.0.3 eg of INDEX

[14]: `t2=("punith","datascience",True,False,45,52,1,2,3)`

[15]: `t2.index(1)`

[15]: 2

[16]: `t2.index("punith")`

[16]: 0

[17]: `t2.index(45)`

[17]: 4

[18]: `## index is the function used to know the index number of any string,bool,num`

2.0.4 the tuples are immutable whereas lists can be muttable therefore tuples have only 2 functions

[ ]:

2.1 3question

[21]: `## sets are the collection of unique linear elements.`

[23]: `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]`

[24]: `set(list)`

[24]: {1, 2, 3, 4}

[ ]:

3 4th question

3.1 dictionary are the collection of linear elements in a {} and the collection of key and values

[26]: `d1={"name":"punith","place":"hassan","age":21}`

[28]: `type(d1)`

[28]: dict

3.1.1 dictionary are unordered

```
[ ]:
```

3.2 5th question

3.2.1 yes dictionary can be nested

```
[31]: d2={"branches_name":{"CSE":"cs","ME":"mechanical engineering"}}
```

```
[34]: ## creating a dictionary inside a dictionary is called nested dictionary
```

```
[ ]:
```

4 7question

```
[59]: d3 = {"language_name" : "Python", "course_name": "Data Science Masters"}
```

```
[60]: d3.values()
```

```
[60]: dict_values(['Python', 'Data Science Masters'])
```

```
[61]: d3.keys()
```

```
[61]: dict_keys(['language_name', 'course_name'])
```

```
[63]: d3["python"]=("abc")
      d3["ML"]=("abc")
      d3["deep learning"]=("abc")
```

```
[64]: d3
```

```
[64]: {'language_name': 'Python',
       'course_name': 'Data Science Masters',
       'python': 'abc',
       'ML': 'abc',
       'deep learning': 'abc'}
```

```
[ ]:
```

5 8th question

5.0.1 the three view objectives are list,tuples and dictionary

```
[68]: p1 = {'Sport': 'Cricket' , 'Teams': ['India', 'Australia', 'England', 'South␣
      ↪Africa', 'Sri Lanka', 'New Zealand']}
```

```
[70]: type(p1)
```

```
[70]: dict
```

```
[73]: p2 = {'Sport': 'Cricket' , 'Teams': {'India', 'Australia', 'England', 'South␣
      ↪Africa', 'Sri Lanka', 'New Zealand'}}
```

```
[74]: type(p2)
```

```
[74]: dict
```

```
[76]: p3 = {'Sport': 'Cricket' , 'Teams': ('India', 'Australia', 'England', 'South␣
      ↪Africa', 'Sri Lanka', 'New Zealand')}
```

```
[78]: type(p3)
```

```
[78]: dict
```

```
[ ]:
```

```
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```