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JUNE  
FRIDAY

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Assignment  
2 Feb

| M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  |
|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 25 | 26 | 27 | 28 | 29 | 30 |    |    |    |    |    |    |    |

APPOINTMENT/MEETING

①

Tuple →

Learning about the built-in function & data types in Python is one of the more significant steps in knowledge you need to make before you're considered proficient in the language.

characters:-

Indeed, ordered, immutable, contain duplicate items.

→

## Q32 Method of Tuple Method in Python

### Method ① Count() Method

→ the count() method of Tuple returns the number of times the given element appears in the tuple.

Syntax:

tuple.count(element)

# Creating tuples

tuple1 = (0, 1, 2, 3, 3, 1, 3, 2)

tuple2 = ('python', 'geeks', 'python',  
'for', ('java', 'python'))

APPOINTMENT NOTES

# Count the appearance of 3

res = tuple1.count(3)

print('Count of 3 in tuple1 is:', res)

Output → count of 3 in tuple1 is: 3

| S  | S  | M  | T  | W  | T  | F  | S  |
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| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
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NEXT MEETING

Index method:-

the index() method returns the first occurrence of the given element from the tuple.

syntax,

tuple.index(element, start, end)

parameters:

- element : the element to be bracket
- start (optional) : the starting index from where the searching is started
- end (optional) : the end till when the searching is done

Ex:-

# Creating tuples

tuple = (0, 1, 2, 3, 2, 3, 1, 3, 2)

# getting the index of 3

res = tuple.index(3)

print('first occurrence of 3 is', res)

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Output

→

first occurrence of 3 is 3.

APPOINTMENT NOTES

① The one is use for Returns the no. of times and other is for searches the tuple.

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| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 25 | 26 | 27 | 28 | 29 | 30 |    |    |    |    |    |    |    |

APPOINTMENT/MEETING

9. Qo3. Which collection datatypes in python do not allow duplicate items?  
 10. Write a code using a set to remove duplicates from the given list.  
 11.

12. List = [1, 1, 1, 2, 1, 3, 1, 4, 2, 1, 2, 2, 2, 3, 2, 4, 3, 1, 3, 2, 1, 3, 3, 3, 4, 4, 1, 1, 4, 2, 3, 4, 4]

- ① Sets are a collection that is  
 2. unordered & indexed. They are  
 3. mutable (changeable) but do  
 4. not allow duplicate values to  
 5. hold. Dictionary is an  
 6. ordered collection that is  
 7. indexed by a key which  
 8. refers to a value.

→

#removing duplicate elements from the list.

7. I = [1, 1, 1, 2, 1, 3, 1, 1, 4, 2, 1, 2, 2, 2, 3, 2, 4, 3, 1, 3, 2, 1, 3, 3, 3, 4, 4, 1, 1, 4, 2, 3, 4, 4]

print("Original list: ", I)

res = [ \*set(I) ]

print("list after removing

8. APPOINTMENT NOTES duplicate elements: ", res)

Output:-

Original list: [1, 1, 1, 2, 1, 3, 1, 1, 4, 2, 3, 4, 4]

List after removing duplicate element:

[1, 2, 3, 4]

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| M  | T  | W  | T  | F  | S  | S  |
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Qo 4union()update()

Union() :- In set theory, the union of two or more sets is the set which contains all the elements (distinct) present in all the sets.

ex:- ~~A = {1, 2, 3, 4, 5}~~ S = A.union B  
print ('A : ', A)  
print

~~A = {1, 2, 3, 4, 5}~~

~~B = {4, 5, 6, 7, 8, 9}~~

~~s = A.union(B)~~

~~print ('A : ', A)~~

~~print ('B : ', B)~~

~~print ('A union B : ', s)~~

④ Update Method: this method is used to return the union of a set and the set of elements from one or more iterable like str, list, set. It is very similar method to union() method.

APPOINTMENT NOTES → difference is union() create & return a new set containing all elements (distinct) present in all the iterable,

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| M   | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  |
| 1   | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 11  | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |

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9 update() method updates the set  
 10 on which this method is called  
 11 with all the distinct elements  
 present in all the iterables.

Syntax: < set object >. update (\* iterable  
 12 object > )

1 ex:-

2 A = {1, 2, 3, 4, 5}

3 B = {4, 5, 6, 7, 8, 9}

A.update(B)

4 print('A union B:', A)

L = [11, 12, 13, 14, 15]

A.update(B, L)

5 print('A union B Union L:', A)

6 **Qo Python Dictionary :-**

It is an ordered collection (Starting from Python 3.7) of items. It stores elements in key-value pairs.

Here, keys are unique identified that are associated with each value.

| S  | M  | T  | W  | F  | S  | S  |
|----|----|----|----|----|----|----|
| 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 1  | 2  | 3  | 4  | 5  |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 29 | 30 | 31 | 1  | 2  | 3  | 4  |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |

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APPOINTMENT/MEETING

ex: Capital-city = { "Nepal": "kathmandu",  
 "Italy": "Rome",  
 "England": "London" }

print(Capital-city)

\* A dictionary is a collection which is ordered, changeable & do not allow duplicates. As of python version 3.7, dictionaries are ordered.

\* Create a Nested Dictionary. If so, please give an example by creating a simple one-level nested dictionary.

nested-dict = { 'dict1': { 'key-A': 'value-A' },  
 'dict2': { 'key-B': 'value-B' } }

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|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
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- APPOINTMENT/MEETING Q7 Using setdefault() method,  
9 Create key named topics in the given  
10 dictionary and also add the value of  
the key as this list  
11 ['Python', 'Machine learning', 'Deep learning']

12 dict1 = {'Language': 'Python', 'course': Data

1 → dict1 = {  
2 'Python': Language,  
3 'Machine': Python,  
4 'Learning': Deep learning,  
5 }

6 'Course URL': Data Science Masters

7 Q8

APPOINTMENT NOTES

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| M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
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APPOINTMENT MEETING

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Q. What are the three view objects in dictionaries? We use three in-built methods in Python to display these three view object for the given dictionary.

```
dict = { 'sport': 'Cricket', 'Teams': }
```

```
{'India', 'Australia', 'England', 'South Africa',
'Sri Lanka', 'New Zealand' } }
```

### Method 1

```
dict = { 'Teams': 'India',
         'Teams': 'Australia',
         'Teams': 'England',
         'Teams': 'South Africa',
         'Teams': 'Sri Lanka',
         'Teams': 'New Zealand' }
```

```
# Teams = dict.setdefault('dict')
print('dict = ', Teams)
Teams
```

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### Method 2

```
# Key is not in the dictionary
```

```
dict = { }
```

```
Teams = { 'India': 'Australia': 'England':
          'Sri Lanka': 'South Africa': 'New Zealand' }
```

```
Teams = Teams.setdefault('Teams')
```

```
print('Teams = ', Teams)
```

```
print('Teams = ', Teams)
```

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|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    |    |    |    |    | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |

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9 (M3)

dict = {'India', 'Srilanka', 'New Zealand',  
10 'South Africa', 'Australia'}

11 Teams = dict.get('default', ' ')

12 print('default', Teams)

print(dict)