True/False: A Python dictionary can contain two keys that are equal, that map to different values.

- True
- False

Correct
Answer: False

True/False: A Python dictionary can contain two different keys that map to the same value.

- True
- False

Correct
Answer: True

Indicate which of the following Python data structures are immutable (select all that apply):

- [ ] Dictionary
- [x] Tuple
- [ ] List
- [ ] String

Correct
Answer:
Tuple, String

Suppose the dictionary `nums` contains the following key-value pairs:

(1, "one")
(2, "two")
(3, "three")
(4, "four")

If the keys in `nums` are iterated over using a for loop (see below), in what order will they be iterated?

```
for key in nums:
    # Do something
```

- Ascending order (1, 2, 3, 4)
- Descending order (4, 3, 2, 1)
- Dictionary ordering is not defined, thus we cannot assume a particular ordering of keys.

Correct

Answer:
Dictionary ordering is not defined, thus we cannot assume a particular ordering of keys.

What are the valid keys of `dict`?

- 'WA', 'CA', 'AZ'
- 'WA', 'CA', 'AZ', 'Dem', 'Rep'
- 'WADem', 'CADem', 'AZDem', 'WARep', 'CARep', 'AZRep'

Correct

Answer:
'WA', 'CA', 'AZ'

What are the values (as in, the value in a key-value pair) in `dict`? (Check all that apply.)

- 47, 52, 76, 14, 88, and 11
'WA', 'CA', and 'AZ'

Correct
Answer:

1/1 What is the result of evaluating `dict['WA']`?

- Evaluates to a dictionary
- Error because 'WA' is not a valid key of dict
- Evaluates to a number
- Evaluates to a string

Correct
Answer:
Evaluates to a dictionary

2/2 What is the result of evaluating `dict['WA'] ['Dem']`? Explain why this happened.

It evaluates to 47. First you evaluate `dict['WA']`, which evaluates to the dictionary { 'Dem': 47, 'Rep': 52 } (in dict, the key 'WA' maps to that value). Then, on that dictionary, you access the key 'Dem', which evaluates to 47.

Correct
Answer:
Feedback:
It evaluates to 47. First you evaluate `dict['WA']`, which evaluates to the dictionary { 'Dem': 47, 'Rep': 52 } (in dict, the key 'WA' maps to that value). Then, on that dictionary, you access the key 'Dem', which evaluates to 47.

Total points: 9/9
Questions or Comments?
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