

1. Which of the following describes one true quality about Python variables?

1 / 1 point

- ☐ Variables in Python are not case-sensitive.
- ☐ Python does not have a concept of a variable scope, which means that variables can be accessed from any part of the code.
- ☒ Variables in Python are not typed, which means that they can store any type of data.
- ☐ Variables in Python don't need to be declared before they are used.



Correct

Correct! Variables in Python aren't typed, that is you aren't required to declare or know what the type is for the value you want to assign

2. What is a valid statement about Python lists?

1 / 1 point

- ☐ Lists cannot contain any arbitrary object. Just integers and strings.
- ☒ Lists are indexed starting from 0
- ☐ Lists are immutable, that is - they can't be changed after they are created



Correct

Correct! In Python the first item in a list has an index of 0.

3. What is a valid statement about Python dictionaries?

1 / 1 point

- ☐ A dictionary cannot contain nested dictionaries
- ☐ A dictionary can only contain string values
- ☒ Python dictionaries cannot have a dictionary as a key



Correct

Correct! Keys have to be a type that is *hashable*, and Python dictionaries aren't *hashable* and will result in an error if you try to use them as a key.

4. What is a valid statement for Python tuples?

1 / 1 point

- ☐ Tuples are mutable. They can be modified once they are created.
- ☒ Tuples are immutable. They cannot be modified once they are created.
- ☐ Tuples are created by placing comma-separated values within curly brackets



Correct

Correct! Tuples are like read-only lists. Once defined (created) you cannot modify them.

5. What are three valid methods for Python lists?

1 / 1 point

- ☐ add, index, sort
- ☒ pop, append, extend
- ☐ clear, remove, describe



Correct

Correct! These are three valid methods you can use in Python lists

6. What are three valid methods for Python dictionaries?

1 / 1 point

- ☒ get, items, values
- ☐ values, extend, get
- ☐ copy, update, append



Correct

Correct! These are three valid methods you can use with Python dictionaries.

7. What would you use to retrieve a value in a Python dictionary from a key named `"item"` that might not exist, preventing an exception and using `True` as a fallback?

1 / 1 point

- ☒`obj.get("item", True)`
- ☐`obj.safe_get("item", True)`
- ☐`obj.get(True, "item")`



Correct

Correct! That is how you would retrieve the value for `"item"` even if it doesn't exist and fallback to `True`

8. What is the right syntax to loop over keys and values from a dictionary named `obj`?

1 / 1 point

- ☒`for key, value in obj.items()`
- ☐`for key, value in obj()`
- ☐`for key, value in obj`



Correct

Correct! You can use `.items()` to provide both the keys and values when looping over a dictionary.

9. Can you add two lists like `[1,2,3] + [4,5,6]` ? What would happen if you do?

1 / 1 point

- ☐ No. You would get a `TypeError`
- ☐ Yes. You would get `[[1,2,3], [4,5,6]]`
- ☒ Yes. You would get `[1,2,3,4,5,6]`



Correct

Correct! You can add two lists together in Python.

10. What is one useful quality of Python sets?

1 / 1 point

- ☒ That its contents are guaranteed to be unique.
- ☐ That sets can use indexes just like lists
- ☐ That it is an immutable data structure



Correct

Correct! Python sets are a useful data structure that ensures that the items it has are unique.