

Weekly challenge 4

1.Fill in the blank: In Python, _____ indicate where a list starts and ends. 1 / 1 point

- ☒ square brackets
- ☐ braces
- ☐ quotation marks
- ☐ parentheses



Correct

2.A data professional is working with a list named `cities` that contains data on global cities. What Python code can they use to add the string `'Tokyo'` to the end of the list? 1 / 1 point

- ☐ `cities.import('Tokyo')`
- ☒ `cities.append('Tokyo')`
- ☐ `cities.pop('Tokyo')`
- ☐ `cities.insert('Tokyo')`



Correct

3.In Python, which of the following characters can a data professional use to instantiate a tuple? 1 / 1 point

- ☐ `< >`
- ☐ `[]`
- ☐ `{ }`
- ☒ `()`



Correct

4.Which of the following statements accurately describe Python dictionaries? Select all that apply. 1 / 1 point

- ☐ Dictionaries are ordered.
- ☒ Dictionaries are unordered.
- ☐ Dictionaries are instantiated with quotation marks.
- ☒ Dictionaries consist of collections of key-value pairs.



Correct

5. A data professional is working with a dictionary named `employees` that contains employee data for a healthcare company. What Python code can they use to retrieve only the dictionary's keys? 1 / 1 point

- ☐ `items.employees()`
- ☐ `keys.employees()`
- ☒ `employees.keys()`
- ☐ `employees.items()`
- ☒

Correct

6. A data professional is working with two Python sets. What function can they use to find the elements present in one set, but not the other? 1 / 1 point

- ☒ `difference()`
- ☐ `intersection()`
- ☐ `union()`
- ☐ `symmetric_difference()`
- ☒

Correct

7. Where are modules accessed in Python? 1 / 1 point

- ☐ Within a set
- ☐ Within a global variable
- ☒ Within a package or library
- ☐ Within a dictionary
- ☒

Correct

8. Which of the following statements accurately describe NumPy arrays? Select all that apply. 1 / 1 point

- ☒ Arrays can be multidimensional.
- ☒

Correct

- ☐ Arrays are immutable.
- ☒ Arrays contain elements of the same data type.
- ☒

Correct

- ☒ Arrays are mutable.
- ☒

Correct

9. A data professional is working with a pandas dataframe named `sales` that contains sales data for a retail website. They want to know the price of the most expensive item. What code can they use to calculate the maximum value of the `Price` column? 1/1 point

- ☒ `sales['Price'].max()`
- ☐ `sales.max().Price`
- ☐ `sales = 'Price'.max()`
- ☐ `sales.max().[Price]`



Correct

10. In pandas, what is the difference between the `iloc[]` and `loc[]` methods? 1/1 point

- ☐ `iloc[]` selects dataframe rows and columns by name; `loc[]` selects dataframe rows and columns by index.
- ☒ `iloc[]` selects dataframe rows and columns by index; `loc[]` selects dataframe rows and columns by name.
- ☐ `iloc[]` merges two dataframes horizontally; `loc[]` merges two dataframes vertically.
- ☐ `iloc[]` merges two dataframes vertically; `loc[]` merges two dataframes horizontally.



Correct

11. A data professional wants to merge two pandas dataframes. They want to join the data so all of the keys from both dataframes get included in the merge. What technique can they use to do so? 1/1 point

- ☐ Right join
- ☐ Left join
- ☐ Inner join
- ☒ Outer join



Correct