

01. Which of the following is incorrect for a dictionary in Python?

- a) each key must be unique
- b) the key should be an immutable object
- c) the len() function returns the sum of key-value elements in the dictionary
- d) the len() function returns the numbers of key-value elements in the dictionary

02. Python name comes from which of the following?

- a) Python Café
- b) Python Forest
- c) Python snake
- d) Monty Python's Flying Circus

03. What does the method items() returns in Python Dictionary?

- a) The method items() returns the lists
- b) The method items() returns the tuples
- c) The method items() returns the keys in a list
- d) The method items() returns the values in a list

04. A complete set of commands is known as:

- a) Instruction list
- b) Code laws
- c) Command-line
- d) Command list

05. Which of the following are correct statements?

- a) True + 1 evaluates to 2
- b) True and False evaluates to False
- c) True or False evaluates to False
- d) 7+ False evaluates to False

06. Octal has the following base:

- a) 2
- b) 8
- c) 10
- d) 16

07. If a list passed into function's argument and modified inside the function:

- a) Will affect the argument
- b) Will not affect the argument
- c) Will give an error

d) Will become global by default

08. An integer number preceded by an 0x (Zero-x) will be treated as:

- a) Octal
- b) Binary
- c) Hexadecimal
- d) Decimal

09. Who created Python?

- a) Guido ban Rossum
- b) Guido van Rossum
- c) Guido the Russian
- d) Guodo van Rossum

10. The meaning of positional parameter is determined by:

- a) Position
- b) Name
- c) Style
- d) None

Problem 1: Function Definition

Define a function called `calculate_area` that takes the radius of a circle as a parameter and returns the area of the circle. Use the formula $\text{area} = \pi \times \text{radius}^2$, and assume $(\pi = 3.14159)$.

Problem 2: Loops and Lists

Write a function called `sum_even_numbers` that takes a list of integers as input and returns the sum of all even numbers in the list.

Problem 3: Try and Except

Create a function named `safe_divide` that takes two numbers as parameters and returns the result of dividing the first number by the second number. Use a try-except block to handle the case where the second number is zero. If the second number is zero, return a custom error message.