Basic Syntax, Conditional Statements and Loops,Theoretical Test

1. What is the correct way to define a variable in Python?

A: variable name = value

B: var variable name = value

C: variable = value;

D: None of the above

1. What is the output of the following Python code that calculates the square root of 25 and performs trigonometric functions on an angle of 45 degrees?  
     
   Картина, която съдържа текст, екранна снимка, Шрифт

   Описанието е генерирано автоматично

A: Square Root of 25: 5.0, Sine of 45 degrees: 0.7071, Cosine of 45 degrees: 0.7071, Tangent of 45 degrees: 1.0

B: Square Root of 25: 5.0, Sine of 45 degrees: 0.5, Cosine of 45 degrees: 0.5, Tangent of 45 degrees: 1.0

C: Square Root of 25: 5.0, Sine of 45 degrees: 0.7071, Cosine of 45 degrees: 0.7071, Tangent of 45 degrees: 0.5

D: Square Root of 25: 5.0, Sine of 45 degrees: 1.0, Cosine of 45 degrees: 1.0, Tangent of 45 degrees: 0.5"

1. In Python, what is the purpose of the "if" statement?

A: To execute a block of code only if a condition is True

B: To execute a block of code only if a condition is False

C: To execute a block of code unconditionally

D: To execute a block of code multiple times

1. In Python, how do you write a single-line comment?

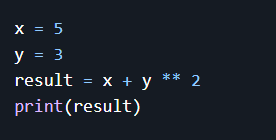
A: /\* This is a comment \*/

B: /<! This is a comment >/

C: # This is a comment

D: // This is a comment

1. What is the output of the following code?



A: 14

B: 15

C: 10

D: 8

1. Which statement is used to exit a loop prematurely in Python?

A: continue

B: break

C: pass

D: stop

1. What is the correct way to check if two variables, and, are equal in Python?

A: a == b

B: a = b

C: a != b

D: a is b

1. In Python, which data type is used to store a sequence of characters?

A: string

B: int

C: float

D: list

1. Which of the following statements is true about Python's elif?

A: It is used to define a function.

B: It is used to handle exceptions.

C: It is used in a loop.

D: It is used for additional conditions in an if-elif-else statement.

1. What is the output of the following code?

Картина, която съдържа Шрифт, текст, Графика, екранна снимка

Описанието е генерирано автоматично

A: 5 4 3 2 1 0

B: 54321

C: 5 4 3 2 1

D: 5 4 3 2

1. BONUS QUESTION -> What will be the output of the code snippet?

Картина, която съдържа текст, екранна снимка, Шрифт

Описанието е генерирано автоматично

A: True

B: False

C: None

D: 9

1. BONUS QUESTION -> What is the output of the following Python code?

Картина, която съдържа текст, екранна снимка, Шрифт

Описанието е генерирано автоматично

A: The factorial of 5 is: 10

B: The factorial of 5 is: 25

C: The factorial of 5 is: 120

D: The factorial of 5 is: 50

1. BONUS QUESTION -> What is the output of this Python code?

Картина, която съдържа Шрифт, екранна снимка, номер, часовник

Описанието е генерирано автоматично

A: 5 10

B: 10 5

C: None of the above

D: Error