1. **Question:** What is the output of the following code?

pythonCopy code

x = 5 y = 2 result = x / y

a) 2.5  
b) 2  
c) 2.0  
d) 2.5 with a remainder

**Answer:** a) 2.5

1. **Question:** In Python, which of the following is used for single-line comments?

a) **#**  
b) **/\* \*/**  
c) **<!-- -->**  
d) **--**

**Answer:** a) **#**

1. **Question:** What will the following code output?

pythonCopy code

my\_list = [1, 2, 3, 4, 5] print(my\_list[1:3])

a) [1, 2]  
b) [2, 3]  
c) [1, 3]  
d) [2, 4]

**Answer:** b) [2, 3]

1. **Question:** Which of the following is used to accept user input in Python?

a) **get()**  
b) **input()**  
c) **accept()**  
d) **read()**

**Answer:** b) **input()**

1. **Question:** What does the **len()** function do in Python?

a) Returns the length of a string  
b) Returns the length of a list  
c) Returns the length of a tuple  
d) All of the above

**Answer:** d) All of the above

1. **Question:** What is the purpose of the **else** clause in a **try...except** block?

a) It is always executed  
b) It is executed when an exception occurs  
c) It is executed when no exception occurs  
d) It is used to define the exception

**Answer:** c) It is executed when no exception occurs

1. **Question:** Which of the following is a valid way to open a file in binary mode?

a) **file = open("example.txt", "rb")**  
b) **file = open("example.txt", "r")**  
c) **file = open("example.txt", "wb")**  
d) **file = open("example.txt", "w")**

**Answer:** a) **file = open("example.txt", "rb")**

1. **Question:** What is the output of the following code?

pythonCopy code

x = True y = False print(not x or y)

a) True  
b) False  
c) Error  
d) None

**Answer:** b) False

1. **Question:** Which of the following is used to remove the last element from a list?

a) **pop()**  
b) **remove()**  
c) **delete()**  
d) **del()**

**Answer:** a) **pop()**

1. **Question:** What does the **pass** statement do in Python?

a) Terminates the program  
b) Skips the current block of code  
c) Raises an exception  
d) None of the above

**Answer:** b) Skips the current block of code

1. **Question:** What does the **str()** function do in Python?

a) Converts a number to a string  
b) Converts a string to a number  
c) Returns the length of a string  
d) Prints a string

**Answer:** a) Converts a number to a string

1. **Question:** How can you check if a variable is of a specific type in Python?

a) **check(type(variable) == desired\_type)**  
b) **isinstance(variable, desired\_type)**  
c) **type(variable) == desired\_type**  
d) **validate(variable, desired\_type)**

**Answer:** b) **isinstance(variable, desired\_type)**

1. **Question:** What is the purpose of the **continue** statement in Python?

a) Terminates the loop  
b) Skips the rest of the code in the loop and continues with the next iteration  
c) Jumps to a specific label in the code  
d) Breaks out of the loop

**Answer:** b) Skips the rest of the code in the loop and continues with the next iteration

1. **Question:** Which of the following is used to concatenate two lists?

a) **merge()**  
b) **concat()**  
c) **extend()**  
d) **+**

**Answer:** d) **+**

1. **Question:** What does the **os.path.join()** method do?

a) Joins two strings  
b) Joins two paths  
c) Joins two lists  
d) None of the above

**Answer:** b) Joins two paths

1. **Question:** In Python, what does the **\_\_init\_\_** method do in a class?

a) Initializes the class  
b) Initializes the object  
c) Initializes the attributes of the object  
d) Initializes the constructor

**Answer:** c) Initializes the attributes of the object

1. **Question:** What is the purpose of the **break** statement in Python?

a) Terminates the program  
b) Skips the current iteration of a loop  
c) Jumps to a specific label in the code  
d) Exits the loop prematurely

**Answer:** d) Exits the loop prematurely

1. **Question:** Which of the following is the correct syntax for a list comprehension?

a) **[x for x in range(10) if x % 2 == 0]**  
b) **{x for x in range(10) if x % 2 == 0}**  
c) **(x for x in range(10) if x % 2 == 0)**  
d) **<x for x in range(10) if x % 2 == 0>**

**Answer:** a) **[x for x in range(10) if x % 2 == 0]**

1. **Question:** How do you import a module named **mymodule** in Python?

a) **import mymodule**  
b) **include mymodule**  
c) **require mymodule**  
d) **from mymodule import \***

**Answer:** a) **import mymodule**

1. **Question:** What does the **random.choice()** function do in Python?

a) Generates a random number  
b) Selects a random element from a list  
c) Chooses a random character from a string  
d) None of the above

**Answer:** b) Selects a random element from a list