

Chapter 01: Basic Python Programming

True / False

1. Python programs require two or more modules.

- a. True
- b. False

ANSWER: False

2. The main python module contains the starting point of execution.

- a. True
- b. False

ANSWER: True

3. You can use the # symbol to create a multiline comment.

- a. True
- b. False

ANSWER: False

4. A docstring is another term for a Python variable that holds a string constant.

- a. True
- b. False

ANSWER: False

5. The keyword while means the same thing as While in Python.

- a. True
- b. False

ANSWER: False

6. In Python, _MyVar15 is a valid variable name.

- a. True
- b. False

ANSWER: True

7. To make your program more secure, use obscure variable names such as xz14dEEa.

- a. True
- b. False

ANSWER: False

8. The keywords True and False are floating point values.

- a. True
- b. False

ANSWER: False

9. If you print the string "Hello, it is a very \nice day", there will be two lines of output.

a. True

b. False

ANSWER: True

10. Use the comparison operator != to check if one value is not equal to another value.

a. True

b. False

ANSWER: True

11. In Python, a variable containing the value 5 will evaluate as true if used with the and logical operator.

a. True

b. False

ANSWER: True

12. The input function returns a numeric value by default.

a. True

b. False

ANSWER: False

13. The print function outputs a newline by default before its arguments are printed.

a. True

b. False

ANSWER: False

14. Standard functions and Python's library functions check the types of their arguments when the function is called.

a. True

b. False

ANSWER: True

15. It is good practice to import all names from a module using the * operator.

a. True

b. False

ANSWER: False

16. Indenting code that should be executed when an if statement evaluates as true makes your program easier to read, but the indentation is not necessary.

a. True

b. False

ANSWER: False

17. The while statement uses the syntax while : and is the preferred control statement to iterate over a definite range of sequences.

- a. True
- b. False

ANSWER: False

18. Strings are compared using ASCII ordering.

- a. True
- b. False

ANSWER: True

19. Strings are mutable objects, which means you can replace their contents.

- a. True
- b. False

ANSWER: False

20. You can use the slice operator to obtain a substring from a string.

- a. True
- b. False

ANSWER: True

21. A literal representation of a list is made using parentheses to enclose items separated by commas.

- a. True
- b. False

ANSWER: False

22. A list mutator is a method used to modify the contents of a list.

- a. True
- b. False

ANSWER: True

23. A tuple is an immutable sequence of items and does not have mutator methods.

- a. True
- b. False

ANSWER: True

24. The expression primes = (2, 3, 5, 7, 11) creates a list named primes.

- a. True
- b. False

ANSWER: False

25. A dictionary object contains zero or more entries where each entry associates a unique key with a value.

- a. True
- b. False

ANSWER: True

Multiple Choice

What is the name of the function that contains the starting point of program execution?

26. What is the name of the function that contains the...

- a. start
- b. main
- c. begin
- d. enter

ANSWER: b

To create an end-of-line comment, which symbol do you use to begin the comment?

27. To create an end-of-line comment, which symbol do ...

- a. #
- b. *
- c. /
- d. @

ANSWER: a

28. What can you use a docstring for?

- a. to hold the name of a document file
- b. to create a large string variable
- c. to hold data of type string
- d. to create a multiline comment

ANSWER: d

29. Which of the following is true about Python keywords?

- a. they can begin with a number, letter, or hyphen
- b. they are case sensitive
- c. they are written in uppercase
- d. they can be a maximum of 6 characters long

ANSWER: b

30. Which statement is true about Python syntax?

- a. a code block must begin with a left brace

- b. each code statement must end with a semicolon
- c. white space is ignored
- d. blocks of code are indicated by indentation

ANSWER: d

31. What keywords does Python use for Boolean values?

- a. Yes, No
- b. On, Off
- c. True, False
- d. Set, Unset

ANSWER: c

32. What symbol is used to insert a tab in a string?

- a. \t
- b. [TAB]
- c. /t
- d. @tab

ANSWER: a

Which comparison operation returns True if variable x is not equal to variable y?

33. Which comparison operation returns True if variabl...

- a. x.ne. y
- b. x neq y
- c. x <> y
- d. x != y

ANSWER: d

Assume x is equal to 5 and y is equal to 0. Which comparison operation returns True?

34. Assume x is equal to 5 and y is equal to 0. Which ...

- a. x == y or y
- b. y
- c. (x > y) and x
- d. x > 0 and None

ANSWER: c

With what character does the print function terminate its output by default?

35. With what character does the print function termin...

- a. newline
- b. null
- c. period
- d. space

ANSWER: a

36. What keyword is used to make a multiway if statement?

- a. else
- b. elif
- c. then
- d. elseif

ANSWER: b

Which statement allows a programmer to run a module as a standalone program or import it from the shell?

37. Which statement allows a programmer to run a modul...

- a. `do _module(main)`
- b. `while main != _module`
- c. `if self == "main()":`
- d. `if __name__ == "__main__":`

ANSWER: d

38. What is the output of the following code?
`sum = 0`
`value = 3`
`while value`

- a. 15
- b. 10
- c. 12
- d. 18

ANSWER: c

What is the output of the following code?
`sum = 0`
`for value in range(1,4):`
`sum += value`
`print(sum)`

39. What is the output of the following code? `<math>\sum_{i=1}^4 i^2</math>`

- a. 5
- b. 10
- c. 4
- d. 6

ANSWER: d

What is the output of the following code?
`sum = 0`
`for value in range(1,4):`
`if value == 2:`
`sum = sum**2`
`sum += value`
`print(sum)`

40. What is the output of the following code? `<math>\sum_{i=1}^4 i^2</math>`

- a. 6
- b. 12
- c. 8
- d. 16

ANSWER: a

What are the values of variables x, y, and z after the following code is run?
`y = 0`
`z = 0`
`for x in range(5,7):`
`if y > z:`
`z, y = y, z`
`y = y + x;`

41. What are the values of variables x, y, and z after...

- a. x == 7, y == 11, z == 6
- b. x == 6, y == 6, z == 5
- c. x = 6, y == 5, z == 6
- d. x == 7, y == 12, z == 5

ANSWER: b

What is the value of z after the following code is run?
`y = 0`
`z = 0`
`for x in range(5,8):`
`z = max(x, y)`
`y = y + x`

42. What is the value of z after the following code is...

- a. 18
- b. 11
- c. 7
- d. 13

ANSWER: b

What is the value of string1 after the following statement is executed?
`string1 = "hello"[:3]`
`+ "python"[0]`

43. What is the value of string1 after the following s...

- a. lpython
- b. llo
- c. help
- d. lop

ANSWER: c

What is the last line of the output when the following code is executed?
`x = 2`
`for exp in range(5):`
`print ("%2d.0" % x**exp)`

44. What is the last line of the output when the follo...

- a. 8.0
- b. 16
- c. 32
- d. 16.0

ANSWER: d

What is the value of newList after the following code is executed?
`newList = ["George", "John", "Thomas", "James"]`
`newList.pop()`
`newList.append("Andrew")`

45. What is the value of newList after the following c...

- a. ["George", "John", "Thomas", "James", "Andrew"]
- b. ["George", "John", "Thomas", "Andrew"]
- c. ["Andrew", "John", "Thomas", "James"]
- d. ["Andrew", "George", "John", "Thomas", "James"]

ANSWER: b

46. Which of the following statements creates a tuple containing four items?

- a. t = [1: 2: 3: 4]
- b. t = {1, 2, 3, 4}
- c. t =
- d. t = (1, 2, 3, 4)

ANSWER: d

What is the last line of output of the following code?

```
pres = {1:"Washington", 16:"Lincoln",
35: "Kennedy", 40:"Reagan"}
for nth in pres: print("%2d:" % nth,pres[nth])
```

47. What is the last line of output of the following c...

- a. 35: Kennedy
- b. 40: Reagan
- c. 03: Kennedy
- d. 04: Reagan

ANSWER: b

48. Which of the following correctly defines a function named myFunc?

- a. def myFunc():
- b. func myfunc:
- c. myfunc()#
- d. int myFunc:

ANSWER: a

49. How do you describe a function that calls itself?

- a. self_calling function
- b. iterative function
- c. derivative function
- d. recursive function

ANSWER: d

Select the answer that should be used to replace the missing code in the following statements.

```
myList = list()
fileObj = open("myfile.dat", "rb")
while True:
    try:
        item = pickle.load(fileObj)
        myList.append(item)
    missing code
> fileObj.close()
break
print(myList)
```

50. Select the answer that should be used to replace t...

- a. if EOF:
- b. elif Error:

- c. except EOFError:
- d. else while TRUE:

ANSWER: c

In a class definition, what type of method uses the values of the object's instance variables without changing them?

51. In a class definition, what type of method uses th...

- a. constructor
- b. accessor
- c. instance
- d. mutator

ANSWER: b