

1. To store a value for later use in Python, the programmer needs to create a:

- A. number
- B. character
- C. variable
- D. boolean

Section	2.1 Variables
Title	What is the term used to store a value for later use in a Python program?
type	mc
section	2.1 Variables
id	testbank-py-1-ch02-01

2. How is a value stored in a variable?

- A. an assignment statement
- B. an expression
- C. a print statement
- D. an equality statement

Section	2.1 Variables
Title	How is a value stored in a variable?
type	mc
section	2.1 Variables
id	testbank-py-1-ch02-03

3. What is the value of the variable `num` after the following code snippet?

```
num = 5
num2 = 6
num = num2 + 3
```

- A. 5
- B. 9
- C. 8
- D. 11

Section	2.1 Variables
Title	What is the value of the variable num after the following code statement?
type	mc
section	2.1 Variables
id	testbank-py-1-ch02-04

4. What is the right way to assign the value of `num + 10` to `num2`?

- A. `num2 = num + 10`
- B. `num = num2 + 10`
- C. `num2 + 10 = num`
- D. `num + 10 = num2`

Section	2.1 Variables
Title	What is the right way to assign the value of num + 10 to num2?
type	mc
section	2.1 Variables
id	testbank-py-1-ch02-06

5. What is wrong with the following code snippet?

```
2ndNum = 78
```

- A. The `2ndNum` variable is never assigned a value
- B. The `2ndNum` variable is assigned a non-numeric value
- C. The `2ndNum` variable is not a valid variable name
- D. The `2ndNum` variable is never initialized

Section 2.1 Variables
Title What is wrong with the following code snippet?
type mc
section 2.1 Variables
id testbank-py-1-ch02-08

6. What is a variable called that should remain unchanged throughout your program?

- A. a constant variable
- B. a data variable
- C. a string variable
- D. a boolean variable

Section 2.1 Variables
Title What is a variable called that should remain unchanged throughout your program?
type mc
section 2.1 Variables
id testbank-py-1-ch02-09

7. Which of the following variables should be coded as a constant in Python?

- A. character: 'a'
- B. string: "hello"
- C. number: 1234
- D. pi: 3.14159

Section 2.1 Variables
Title Python naming conventions for variables
type mc
section 2.1 Variables
id testbank-py-1-ch02-10

8. Which of the following variable names follows the Python naming convention for constants?

- A. `maxSize`
- B. `MAXSIZE`
- C. `MAX SIZE`
- D. `max_size`

Section 2.1 Variables
Title Python naming conventions for variables
type mc
section 2.1 Variables
id testbank-py-1-ch02-11

9. Why is it important to follow Python naming standards for variables representing constants?

- A. it is good programming style
- B. it is required by the Python programming language
- C. it is required by graphic programs
- D. it is required for all non-zero numbers

Section 2.1 Variables

Title	Python naming conventions for variables
type	mc
section	2.1 Variables
id	testbank-py-1-ch02-12

10. Which of the following is an appropriate constant name to represent the number of pencils in a pack?

- A. `NUM_PENCILS_PER_PACK = 12`
- B. `numPencilsPerPack = 12`
- C. `NUMpencilsPERpack = 12`
- D. `numpencilsperpack = 12`

Section	2.1 Variables
Title	Which of the following is an appropriate constant name to represent the number of pencils in a pack?
type	mc
from	testbank-py-1-ch02-14
section	2.1 Variables
id	testbank-py-2-ch02-14

11. A variable is:

- A. A storage location with a name
- B. An assignment statement
- C. An expression
- D. A point in a program where a decision is made

Section	2.1 Variables
Title	What is the definition of a variable?
type	mc
from	testbank-py-1-ch02-02
section	2.1 Variables
id	testbank-py-2-ch02-02

12. What is wrong with this assignment statement?

```
num + 10 = num2
```

- A. The left hand side of an assignment statement cannot include an operator.
- B. Nothing, this statement compiles and executes.
- C. The value of `10` must be defined before this statement can be executed.
- D. The `num` variable must be defined before this statement can be executed

Section	2.1 Variables
Title	What is wrong with this assignment statement?
type	mc
from	testbank-py-1-ch02-05
section	2.1 Variables
id	testbank-py-2-ch02-05

13. What is wrong with the following code snippet?

```
num = 78A
```

- A. The `num` variable is never assigned a value
- B. `78A` is not a valid value in a Python program
- C. The name `num` is not a valid variable name
- D. The `num` variable is never initialized

Section	2.1 Variables
Title	What is wrong with the following code snippet?

type	mc
from	testbank-py-1-ch02-07
section	2.1 Variables
id	testbank-py-2-ch02-07

14. Which line of code creates a variable named x and initializes it to the integer 5?

- A. `x = 5.0`
- B. `x = 5`
- C. `x = '5'`
- D. `x = "5"`

Section	2.1.2 Number Types
Title	Which line of code creates a variable named x and initializes it to the integer 5?
type	mc
from	testbank-py-1-ch02-15
section	2.1.2 Number Types
id	testbank-py-2-ch02-15

15. Which of the following items is an example of a floating-point literal?

- A. `100000`
- B. `100,000`
- C. `100000.0`
- D. `100,000.0`

Section	2.1.2 Number Types
Title	Which of the following items is an example of a floating-point literal?
type	mc
section	2.1.2 Number Types
id	testbank-py-2-ch02-97

16. Which of the following names is **not** a legal variable name?

- A. `bottle-volume`
- B. `cans_per_pack`
- C. `four`
- D. `x2`

Section	2.1.3 Variable Names
Title	Which of the following names is not a legal variable name?
type	mc
section	2.1.3 Variable Names
id	testbank-py-1-ch02-16

17. Which of the following statements about variable names is **not** correct?

- A. Variable names are case sensitive.
- B. Variable names can begin with a letter, an underscore or a number.
- C. Variable names cannot be reserved words such as `if` and `class`.
- D. Variable names cannot contain symbols such as `?` and `%`.

Section	2.1.3 Variable Names
Title	Which statement about variable names is not correct?
type	mc
section	2.1.3 Variable Names
id	testbank-py-2-ch02-98

18. Which of the following names is the best for a constant variable holding the price of a can of soda?

- A. `soda_price`
- B. `soda-price`
- C. `SodaPrice`
- D. `SODA_PRICE`

Section	2.1.4 Constants
Title	Which of the following names is the best for a constant variable holding the price of a can of soda?
type	mc
section	2.1.4 Constants
id	testbank-py-1-ch02-17

19. What convention is normally used when naming constants in a Python program?
- A. Constant names are normally written in all capital letters.
 - B. Constant names normally begin with a # character.
 - C. Constant names normally begin and end with an underscore.
 - D. Constant names normally begin with a capital letter followed only by numbers.

Section	2.1.4 Constants
Title	What convention is normally used when naming constants in a Python program?
type	mc
section	2.1.4 Constants
id	testbank-py-2-ch02-99

20. What symbol is used to begin a comment in a Python program?
- A. !
 - B. @
 - C. #
 - D. \$

Section	2.1.5 Comments
Title	What symbol is used to begin a comment in a python program?
type	mc
section	2.1.5 Comments
id	testbank-py-1-ch02-18

21. A numeric constant that appears in your code without explanation is known as a:
- A. floating-point number
 - B. magic number
 - C. string
 - D. variable

Section	2.1.5 Comments
Title	What name is given to a numeric constant that appears in your code without explanation?
type	mc
section	2.1.5 Comments
id	testbank-py-2-ch02-100

22. Which of the following statements correctly multiplies `num1` times `num2`?

- A. `num1 * num2`
- B. `num1 x num2`
- C. `num1 · num2`
- D. `num1 ** num2`

Section	2.2 Arithmetic
Title	Which of the following statements correctly multiplies <code>num1</code> times <code>num2</code> ?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-19

23. What is the value of `result` after the following code snippet?

```
num1 = 10
num2 = 20
```

```
num3 = 2
result = num1 / num2 / num3
print(result)
```

- A. 1
- B. 0
- C. The code has an error
- D. 0.25

Section	2.2 Arithmetic
Title	What is the value of result after the following code snippet?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-22

24. What will be the values of the variables `num1` and `num2` after the given set of assignments?

```
num1 = 20
num2 = 10
num1 = num1 + num2 / 2
num2 = num1
```

- A. `num1 = 20.0, num2 = 10.0`
- B. `num1 = 15.0, num2 = 10.0`
- C. `num1 = 25.0, num2 = 25.0`
- D. `num1 = 15.0, num2 = 15.0`

Section	2.2 Arithmetic
Title	What will be the values of the variables <code>num1</code> and <code>num2</code> after the given set of assignments?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-23

25. What is the value of `result` after the following code snippet?

```
num1 = 10
num2 = 20
num3 = 2
result = num1 // num2 // num3
print(result)
```

- A. 1
- B. 0
- C. The code has an error
- D. 0.25

Section	2.2 Arithmetic
Title	What is the value of result after the following code snippet?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-24

26. What is the value of `result` after the following code snippet?

```
num1 = 20
num2 = 10
num3 = 2
result = num1 // num2 // num3
print(result)
```

- A. 1
- B. 0
- C. The code has an error
- D. 0.25

Section	2.2 Arithmetic
Title	What is the value of result after the following code snippet?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-25

27. What is the value of `result` after the following code snippet?

```
num1 = 20
num2 = 10
num3 = 2
result = num1 // num2 / num3
print(result)
```

- A. 1.0
- B. 0.0
- C. The code has an error
- D. 0.25

Section	2.2 Arithmetic
Title	What is the value of result after the following code snippet?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-26

28. Which code snippet is the correct Python equivalent to the following Algebraic expression ?

$$c = \sqrt{a^2 + b^2}$$

- A. `sqrt(a ^ 2 + b ^ 2)`
- B. `sqrt(a ** 2 + b ** 2)`
- C. `sqrt(a * 2 + b * 2)`
- D. `squareroot(a ** 2 + b ** 2)`

Section	2.2 Arithmetic
Title	What is the value of result after the following code snippet?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-28

29. What symbol is used to find remainder of a floor division?

- A. `//`
- B. `/`
- C. `%`
- D. `#`

Section	2.2 Arithmetic
Title	What symbol is used to find remainder of a floor division?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-29

30. A(n) _____ is a collection of programming instructions that carry out a particular

task.

- A. argument
- B. parameter
- C. function
- D. literal

Section	2.2 Arithmetic
Title	What is a collection of programming instructions that carry out a particular task?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-30

31. What is the value of `4 ** 3`?

- A. 12
- B. 64
- C. 1
- D. Nothing, there is an error in the statement

Section	2.2 Arithmetic
Title	What is the value of <code>4 ** 3</code> ?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-31

32. What is returned by the function: `round(x)` if `x = 5.64`?

- A. Nothing, there is an error in the statement
- B. 5
- C. 5.6
- D. 6

Section	2.2 Arithmetic
Title	What is returned by the function: <code>round(x)</code> if <code>x = 5.64</code> ?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-32

33. What is returned by the function: `abs(x)` if `x = 5.64`?

- A. Nothing, there is an error in the statement
- B. 5
- C. 5.64
- D. 6

Section	2.2 Arithmetic
Title	What is returned by the function: <code>abs(x)</code> if <code>x = 5.64</code> ?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-33

34. What is returned by the function: `max(1, 4, 15, 2, 3, 24)`?

- A. 1
- B. 24
- C. 15
- D. 2

Section	2.2 Arithmetic
Title	What is returned by the max function?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-34

35. What is returned by the function: `round(3.14159, 2)`?

- A. 3
- B. 3.14159
- C. 3.2
- D. 3.14

Section	2.2 Arithmetic
Title	What is returned by the function: round(3.14159, 2)?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-35

36. What must be done first before you can use a function from the standard library?

- A. the function must be defined
- B. the function must be imported
- C. the function must be included in a module
- D. the function must be enclosed in parenthesis

Section	2.2 Arithmetic
Title	What must be done first before you can use a function from the standard library?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-38

37. What is returned by the function: `sqrt(64)`?

- A. 8.0
- B. 32.0
- C. 4.0
- D. 64.0

Section	2.2 Arithmetic
Title	What is returned by the sqrt function?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-39

38. What is wrong with the following code snippet?

```
((num1 + num2) * num3 / 2 * (1 - num4))
```

- A. nothing, the code compiles and runs
- B. there is an extra parenthesis
- C. parenthesis are not required
- D. illegal expression

Section	2.2 Arithmetic
Title	What is wrong with the following code snippet?
type	mc
section	2.2 Arithmetic
id	testbank-py-1-ch02-40

39. Which of the following statements correctly calculates the average of three numbers: `num1`, `num2`, and `num3`?

- A. `num1 + num2 + num3 / 3`
- B. `num1 + num2 + num3 % 3`
- C. `(num1 + num2 + num3) / 3`
- D. `(num1 + num2 + num3 / 3)`

Section	2.2 Arithmetic
Title	Which of the following statements computes the average of three numbers?
type	mc
from	testbank-py-1-ch02-20
section	2.2 Arithmetic
id	testbank-py-2-ch02-20

40. Which of the following suggestions is the best way to make code easier for other programmers to understand?

- A. Use more statements in the source code.
- B. Give each variable a name that explains its purpose.
- C. Avoid using complex calculations in the source code
- D. Use single-letter variable names in the source code

Section	2.2 Arithmetic
Title	What is the best way to make code easier for other programmers to understand?
type	mc
from	testbank-py-1-ch02-21
section	2.2 Arithmetic
id	testbank-py-2-ch02-21

41. Assume that you have an integer variable, `pennies`, that currently contains an integer number of pennies. Which statement determines the number of dollars and cents for that number of pennies?

- A. `dollars = pennies // 100`
`cents = pennies % 100`
- B. `dollars = pennies / 100`
`cents = pennies % 100`
- C. `dollars = pennies // 100`
`cents = pennies / 100`
- D. `dollars = pennies % 100`
`cents = pennies / 100`

Section	2.2 Arithmetic
Title	Which statement determines the number of dollars and cents for a number of pennies?
type	mc
from	testbank-py-1-ch02-27
section	2.2 Arithmetic
id	testbank-py-2-ch02-27

42. What is wrong with the following code snippet?

```
result = num1 // num2 / num3
num1 = 20
num2 = 10
num3 = 2
print(result)
```

- A. A variable is used before it is assigned a value.
- B. Nothing, the code compiles and runs.
- C. The `//` symbol cannot be used in a Python program.
- D. One or more of the variable names is not valid.

Section	2.2 Arithmetic
Title	What is wrong with the following code snippets which includes variables?
type	mc
from	testbank-py-1-ch02-36
section	2.2 Arithmetic
id	testbank-py-2-ch02-36

43. A(n) _____ is a collection of code that has been written by someone else that is ready for you to use in your program.

- A. variable
- B. argument
- C. function
- D. library

Section	2.2 Arithmetic
Title	What is a collection of code that has been written and translated by someone else.
type	mc
from	testbank-py-1-ch02-37
section	2.2 Arithmetic
id	testbank-py-2-ch02-37

44. Consider the following code segment:

```
x = 5
y = 7
z = x - y * 2
```

After this code segment executes, the value of z is:

- A. -9
- B. -4
- C. 5
- D. 7

Section	2.2.1 Basic Arithmetic Operations
Title	Evaluate expressions involving basic arithmetic operations
type	mc
section	2.2.1 Basic Arithmetic Operations
id	testbank-py-1-ch02-41

45. The Python code that represents the formula $c = (a / b)^3$ is:

- A. `c = a / b ** 3`
- B. `c = (a / b) ** 3`
- C. `c = 3 ^ (a / b)`
- D. `c = (a / b) ^ 3`

Section	2.2.2 Powers
Title	Translate a formula to equivalent Python code
type	mc
section	2.2.2 Powers
id	testbank-py-1-ch02-42

46. Consider the following code segment:

```
x = 5
y = 3
z = 2
result = x // y + x % z
```

After this code segment, the value of `result` is:

- A. 2
- B. 3
- C. 4
- D. 5

Section	2.2.3 Floor Division and Remainder
Title	Evaluate an expression involving division and remainder
type	mc
section	2.2.3 Floor Division and Remainder
id	testbank-py-1-ch02-43

47. Which function call will cause Python to report an error?

- A. `abs(1, 2)`
- B. `max(1, 2)`
- C. `min(1, 2)`
- D. `round(1, 2)`

Section	2.2.4 Calling Functions
Title	Which function call will cause Python to report an error?
type	mc
section	2.2.4 Calling Functions
id	testbank-py-2-ch02-101

48. Which statement computes the square root of 5 and stores it in the variable, `r`? Assume that the `math` module has already been imported.

- A. `r = math.squareRoot(5)`
- B. `r = math.sqrt(5)`
- C. `r = math.squareRoot[5]`
- D. `r = math.sqrt[5]`

Section	2.2.5 Mathematical Functions
Title	Which statement computes the square root of 5?
type	mc
section	2.2.5 Mathematical Functions
id	testbank-py-1-ch02-44

49. Which of the following statements computes the minimum of the variables `a`, `b`, `c` and `d`, and stores it in `x`?

- A. `x = minimum(a, b, c, d)`
- B. `x = min(a, b, c, min(d))`
- C. `x = min(min(a, b), min(c, d))`
- D. `min(a, b, c, d) = x`

Section	2.2.5 Mathematical Functions
Title	Which statement computes the minimum value of four
type	mc
section	2.2.5 Mathematical Functions
variables?	
id	testbank-py-1-ch02-45

50. What is the value of `length` after this statement: `length = len("Good Morning")`?

- A. 10
- B. 11
- C. 12
- D. 13

Section	2.4 Strings
Title	What is the value of length after this statement: <code>length = len("Good Morning")</code> ?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-47

51. Which statement correctly creates a new variable by combining the two string variables: `firstName` and `lastName`?

- A. `name = "firstName" + "lastName"`
- B. `name = firstName + lastName`
- C. `name = first name + last name`
- D. `name = firstName & lastName`

Section	2.4 Strings
Title	Which statement correctly creates a new variable by combining the strings <code>firstName</code> and <code>lastName</code> ?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-49

52. What is printed from the following code snippet:

```
message = "ho.."
print(message * 3)
```

- A. `ho..ho..ho`
- B. `ho..`
- C. `ho..ho..ho..`
- D. nothing is printed, this code snippet causes an error

Section	2.4 Strings
Title	What is printed from the given snippet?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-50

53. What is printed by the following code snippet:

```
street = " Main Street"
address = 123 + street
print(address)
```

- A. 123Main Street
- B. 123 Main Street
- C. 123 "Main Street"
- D. nothing is printed, this code snippet causes an error

Section	2.4 Strings
Title	What is printed from the given snippet?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-51

54. The following code snippet has an error, how can this be corrected so it prints: 123 Main Street?

```
1. street = " Main Street"
2. address = 123 + street
3. print(address)
```

- A. change the value '123' in line 2 to a string using the `str` function
- B. reverse lines 1 and 2
- C. change line 1 to read: `street = 123 + "Main Street"`
- D. change line 2 to read: `address = 123 + "Main Street"`

Section	2.4 Strings
Title	What has to change to correctly print a street number and street name?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-52

55. What is printed by the following code snippet?

```
num = int("45") * float("1.5")
print(num)
```

- A. nothing, this causes an error
- B. `46.5`
- C. `45 * 1.5`
- D. `67.5`

Section	2.4 Strings
Title	What is printed by the following code snippet?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-54

56. What is the index value of the letter 'h' in the string below ?

```
message = "hello"
```

- A. `1`
- B. `0`
- C. `3`
- D. `4`

Section	2.4 Strings
Title	What is the index value of the letter 'h' in the string below ?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-55

57. Given the code snippet below, what code is needed to print the person's initials?

```
firstName = "Pamela"
middleName = "Rose"
lastName = "Smith"
```

- A. `print(firstName[1], middleName[1], lastName[1])`
- B. `print(firstName[0], middleName[0], lastName[0])`
- C. `print(firstName + middleName + lastName)`
- D. `print(firstName, middleName, lastName)`

Section	2.4 Strings
Title	Given the code snippet below, what code is needed to print the person's initials?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-56

58. Which statement finds the last letter of the string variable `name`?

- A. `last = name[len(name)]`
- B. `last = len(name) - 1`
- C. `last = len(name)`
- D. `last = name[len(name) - 1]`

Section	2.4 Strings
Title	Which statement finds the last letter of the string variable <code>name</code> ?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-58

59. A _____ is a collection of programming instructions that can be applied to an object.

- A. function
- B. method
- C. class
- D. object

Section	2.4 Strings
Title	Which is the name of a collection of programming instructions that carry out a particular task to control the behavior of an object?
type	mc
section	2.4 Strings
id	testbank-py-1-ch02-59

60. A sequence of characters is referred to as a:

- A. string
- B. module
- C. variable
- D. expression

Section	2.4 Strings
Title	What is a sequence of characters?
type	mc
from	testbank-py-1-ch02-46
section	2.4 Strings
id	testbank-py-2-ch02-46

61. What is it called when you join two strings together in Python?

- A. concatenation
- B. addition
- C. repetition
- D. conversion

Section	2.4 Strings
Title	What is it called when you join two strings together in Python?
type	mc
from	testbank-py-1-ch02-48
section	2.4 Strings

62. What functions can be used to convert a string into a number?

- A. `stri` and `len`
- B. `int` and `float`
- C. `sqrt`, `abs` and `round`
- D. `integer` and `float`

Section	2.4 Strings
Title	What functions are used to convert strings to numbers?
type	mc
from	testbank-py-1-ch02-53
section	2.4 Strings
id	testbank-py-2-ch02-53

63. What output is generated by the following code snippet?

```
firstName = "Pamela"
middleName = "Rose"
lastName = "Smith"
print(firstName[0], middleName[0], lastName[5])
```

- A. nothing, this causes an index of bounds error
- B. `PRh`
- C. `P R h`
- D. `PRS`

Section	2.4 Strings
Title	Given the code snippet below, what code is printed?
type	mc
from	testbank-py-1-ch02-57
section	2.4 Strings
id	testbank-py-2-ch02-57

64. What is printed by the following code snippet?

```
name = "Robert"
formalName = name.upper()
print(formalName)
```

- A. Robert
- B. robert
- C. ROBERT
- D. formalName

Section	2.4 Strings
Title	Which is the result of the following code snippet?
type	mc
from	testbank-py-1-ch02-60
section	2.4 Strings
id	testbank-py-2-ch02-60

65. What is printed by the following code snippet?

```
name = "Robert"
formalName = name.lower()
print(formalName)
```

- A. Robert

- B. robert
- C. ROBERT
- D. formalName

Section	2.4 Strings
Title	Which is the result of the following code snippet?
type	mc
from	testbank-py-1-ch02-61
section	2.4 Strings
id	testbank-py-2-ch02-61

66. What is printed by the following code snippet?

```
name = "today is thursday"
name.replace("t", "T")
name.replace("i", "I")
print(name)
```

- A. today is thursday
- B. Today is Thursday
- C. Today Is Thursday
- D. Today Is thursday

Section	2.4 Strings
Title	Which is the result of the following code snippet?
type	mc
from	testbank-py-1-ch02-62
section	2.4 Strings
id	testbank-py-2-ch02-62

67. What is printed by the following code snippet?

```
name = "today is thursday"
newName = name.replace("t", "T")
print(newName)
```

- A. today is thursday
- B. Today is Thursday
- C. Today Is Thursday
- D. Today Is thursday

Section	2.4 Strings
Title	Which is the result of the following code snippet?
type	mc
from	testbank-py-1-ch02-63
section	2.4 Strings
id	testbank-py-2-ch02-63

68. What is the value of x after the following code segment?

```
x = len("Hello World!")
```

- A. 10
- B. 11
- C. 12
- D. 13

Section	2.4.1 The String Type
----------------	-----------------------

Title	Determine the length of a string
type	mc
section	2.4.1 The String Type
id	testbank-py-1-ch02-64

69. Assume that `s` is an arbitrary string containing at least 2 characters. What is displayed by the following code segment?

```
print(s[0], s[len(s) - 1])
```

- A. The first character of `s`, followed immediately by the second last character of `s`.
- B. The first character of `s`, followed immediately by the last character of `s`.
- C. The first character of `s`, followed by a space, followed by the second last character of `s`.
- D. The first character of `s`, followed by a space, followed by the last character of `s`.

Section	2.4.1 The String Type
Title	Display specific characters from a string
type	mc
section	2.4.1 The String Type
id	testbank-py-1-ch02-65

70. Which of the following symbols can be used to begin a string literal in Python?

- A. `*`
- B. `#`
- C. `"`
- D. `>`

Section	2.4.1 The String Type
Title	Which of the following symbols can be used to begin a string literal in Python?
type	mc
section	2.4.1 The String Type
id	testbank-py-2-ch02-13

71. What is the value of `words` after the following code segment?

```
words = "Hello" + "World" * 3
```

- A. `"HelloWorldWorldWorld"`
- B. `"Hello World World World"`
- C. `"HelloWorldHelloWorldHelloWorld"`
- D. `"Hello World Hello World Hello World"`

Section	2.4.2 Concatenation and Repetition
Title	String Concatenation and Repetition
type	mc
section	2.4.2 Concatenation and Repetition
id	testbank-py-1-ch02-66

72. Which of the following statements causes Python to report an error?

- A. `x = 17 + 18.4`
- B. `x = 17 + "18.4"`
- C. `x = 17 + int(18.4)`
- D. `x = 17 + float("18.4")`

Section	2.4.3 Converting Between Numbers and Strings
Title	Working with Numbers and Strings
type	mc

section	2.4.3 Converting Between Numbers and Strings
id	testbank-py-1-ch02-67

73. What letter is displayed by the following code segment?

```
title = "Python for Everyone"
print(title[3])
```

- A. e
- B. h
- C. o
- D. t

Section	2.4.4 Strings and Characters
Title	Identify a character within a string
type	mc
section	2.4.4 Strings and Characters
id	testbank-py-1-ch02-68

74. Consider the following code segment:

```
product = "Cookies"
product = product.lower()
```

After this code segment executes, the value of the **product** variable is:

- A. "cookies"
- B. "cOOKIES"
- C. "Cookies"
- D. "COOKIES"

Section	2.4.5 String Methods
Title	Trace code that invokes the lower method on a string
type	mc
section	2.4.5 String Methods
id	testbank-py-1-ch02-69

75. Consider the following code segment:

```
title = "Python for Everyone"
newTitle = title.replace("e", "*")
```

After this code runs, the value stored in **newTitle** is:

- A. "Python for *veryone"
- B. "Python for Ev*ryone"
- C. "Python for Ev*ryon*"
- D. "Python for *v*ryon*"

Section	2.4.5 String Methods
Title	Trace code that invokes the replace method on a string
type	mc
section	2.4.5 String Methods
id	testbank-py-1-ch02-70

76. What is displayed by the following code segment?

```
print("\nHello World!\n")
```

- A. Hello World!
- B. "Hello World!"
- C. \"Hello World!\"
- D. The program reports an error

Section 2.4.5 String Methods
Title Trace code that includes escape sequences
type mc
section 2.4.5 String Methods
id testbank-py-1-ch02-71

77. Which statement causes **A** and **B** to be printed on different lines?

- A. `print("AB")`
- B. `print("A,B")`
- C. `print("A\nB")`
- D. `print("A", "B")`

Section 2.4.5 String Methods
Title Which statement causes A and B to be printed on different lines?
type mc
section 2.4.5 String Methods
id testbank-py-2-ch02-102

78. Which statement correctly saves the price in the variable **cost**?

```
userInput = input("Please enter the price:")
```

- A. `cost = float(userInput)`
- B. `cost = userInput`
- C. `cost = int(userInput)`
- D. `cost = float[userInput]`

Section 2.5 Input and Output
Title Which statement correctly saves the price in the variable cost?
type mc
section 2.5 Input and Output
id testbank-py-1-ch02-75

79. Which statement correctly saves the number of items in the variable **quantity**?

```
userInput = input("Please enter the quantity:")
```

- A. `quantity = float(userInput)`
- B. `quantity = userInput`
- C. `quantity = int(userInput)`
- D. `quantity = int[userInput]`

Section 2.5 Input and Output
Title Which statement correctly saves the price in the variable quantity?
type mc
section 2.5 Input and Output
id testbank-py-1-ch02-76

80. What is printed by the following code snippet?

```
cost = 25.45378
print("%.2f" % cost)
```

- A. 25.45378

- B. %25.45
- C. 25.45
- D. nothing, there is an error

Section 2.5 Input and Output
Title Which is printed by the following code snippet?
type mc
section 2.5 Input and Output
id testbank-py-1-ch02-77

81. Which output format string correctly allows for 5 positions before and two digits after the decimal point?

- A. "%8.2f"
- B. "%5.2f"
- C. "%7.2f"
- D. "%5d.2f"

Section 2.5 Input and Output
Title Which output format string correctly allows for 5 positions before and two digits after the decimal point?
type mc
section 2.5 Input and Output
id testbank-py-1-ch02-78

82. Which output format correctly prints an item description left justified with up to 10 letters?

- A. "%10"
- B. "%10s"
- C. "%-10s"
- D. "-%10s"

Section 2.5 Input and Output
Title Which output format correctly prints an item description left justified with up to 10 letters?
type mc
section 2.5 Input and Output
id testbank-py-1-ch02-79

83. What is the output for the following code snippet:

```
area = 25
print("The area is %05d" % area)
```

- A. The area is 25
- B. nothing, there is an error in the code snippet
- C. The area is 00025
- D. The area is 25

Section 2.5 Input and Output
Title What is the output for the following code snippet?
type mc
section 2.5 Input and Output
id testbank-py-1-ch02-80

84. What function is used to read a value from the keyboard?

- A. input
- B. print
- C. keyboard
- D. next

Section	2.5 Input and Output
Title	What function is used to read input from the keyboard?
type	mc
from	testbank-py-1-ch02-72
section	2.5 Input and Output
id	testbank-py-2-ch02-72

85. The message used to tell the user what input is expected is known as a(n):

- A. input
- B. keyword
- C. comment
- D. prompt

Section	2.5 Input and Output
Title	The message used to tell the user what input is expected is known as a(n):
type	mc
from	testbank-py-1-ch02-73
section	2.5 Input and Output
id	testbank-py-2-ch02-73

86. What is the data type of the value returned by the input function?

- A. integer
- B. string
- C. float
- D. character

Section	2.5 Input and Output
Title	What is the data type of the value returned by the input function?
type	mc
from	testbank-py-1-ch02-74
section	2.5 Input and Output
id	testbank-py-2-ch02-74

87. Consider the following code segment:

```
a = input("Enter the value of a: ")
b = input("Enter the value of b: ")
print(a + b)
```

When this code segment is run the user enters 1 at the first prompt and 5 at the second prompt. The output displayed is:

- A. 1
- B. 6
- C. 15
- D. 1 + 5

Section	2.5.1 User Input
Title	Trace code that reads two values from the user
type	mc
section	2.5.1 User Input
id	testbank-py-1-ch02-81

88. The line of code which reads a value from the user and stores it in a variable named `x` as a floating-point value is:

- A. `x = float()`
- B. `x = input("Enter the value of x: ")`

- C. `x = float(input("Enter the value of x: "))`
- D. `x = input(float())`

Section	2.5.2 Numerical Input
Title	Read numerical input from the user
type	mc
section	2.5.2 Numerical Input
id	testbank-py-1-ch02-82

89. The line of code that displays the floating point number stored in the variable `x` using 3 decimal places is:

- A. `print("%.3f", x)`
- B. `print("%.3f" % x)`
- C. `print("%3.f", x)`
- D. `print("%3.f" % x)`

Section	2.5.3 Formatted Output
Title	Format output to 3 decimal places
type	mc
section	2.5.3 Formatted Output
id	testbank-py-1-ch02-83

90. What output is generated by the following code segment?

```
a = 10.0
b = 0.50
print("The total is %.2f and the tax is %.2f." % (a, b))
```

- A. The total is .00 and the tax is .50
- B. The total is 10.0 and the tax is 0.5
- C. The total is 10.0 and the tax is 0.50
- D. The total is 10.00 and the tax is 0.50

Section	2.5.3 Formatted Output
Title	Format multiple values in a single output statement
type	mc
section	2.5.3 Formatted Output
id	testbank-py-1-ch02-84

91. Consider the following code segment:

```
x = 12
print("%d%" % x)
```

The output generated by this code segment is:

- A. 12
- B. %12
- C. 12%
- D. 12%%

Section	2.5.3 Formatted Output
Title	Format integer output
type	mc
section	2.5.3 Formatted Output
id	testbank-py-1-ch02-85

92. A graphics application shows information inside a

- A. panel

- B. window
- C. form
- D. page

Section	2.6 Graphics: Simple Drawings
Title	A graphics application shows information inside a _____
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-1-ch02-86

93. Which statement draws a square on the canvas?

- A. `canvas.drawRect(0, 50, 0, 50)`
- B. `canvas.drawRect(50, 50, 0, 0)`
- C. `canvas.drawRect(0, 0, 50, 100)`
- D. `canvas.drawRect(0, 0, 50, 50)`

Section	2.6 Graphics: Simple Drawings
Title	Which statement draws a square on the canvas?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-1-ch02-87

94. Which statement sets the fill color when drawing shapes on the canvas?

- A. `canvas.setOutline("black")`
- B. `canvas.setFill("black")`
- C. `canvas.fill("black")`
- D. `canvas.fillRect("black")`

Section	2.6 Graphics: Simple Drawings
Title	Which statement fills a shape?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-1-ch02-88

95. Which statement writes the word **Hello** on the canvas?

- A. `canvas.setString(10, 10, "Hello")`
- B. `canvas.setText(10, 10, "Hello")`
- C. `canvas.drawText(10, 10, "Hello")`
- D. `canvas.drawString(10, 10, "Hello")`

Section	2.6 Graphics: Simple Drawings
Title	Which statement writes text to the canvas?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-1-ch02-89

96. Which of the given print statements generates the following output?

ABCDE"

- A. `print("ABCDE\\")`
- B. `print("ABCDE\"")`
- C. `print("ABCDE")`
- D. `print("ABCDE\\")`

Section	2.6 Graphics: Simple Drawings
Title	Which print statement generates output with quote and backslash?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-1-ch02-90

97. Which statement imports the entire contents of the `sympy` module?

- A. `from sympy import *`
- B. `import contents`
- C. `import * from sympy`
- D. `sympy import`

Section	2.6 Graphics: Simple Drawings
Title	Which statement imports the entire contents of the sympy module?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-2-ch02-94

98. Which statement creates an expression in SymPy form?

- A. `f = x ** 2`
- B. `f = sympify("x ** 2")`
- C. `f = sympy(x ** 2)`
- D. `sympy("f = x ** 2")`

Section	2.6 Graphics: Simple Drawings
Title	Which statement creates an expression in SymPy form?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-2-ch02-95

99. Which SymPy function is used to display a graph of a mathematical function?

- A. `diff`
- B. `draw`
- C. `plot`
- D. `subs`

Section	2.6 Graphics: Simple Drawings
Title	Which SymPy function is used to display a graph of a mathematical function?
type	mc
section	2.6 Graphics: Simple Drawings
id	testbank-py-2-ch02-96

100. Consider the following code segment:

```
from graphics import GraphicsWindow

win = GraphicsWindow(400, 200)
canvas = win.canvas()
```

The line of code that should be added to the end of the code segment above to draw a diagonal line connecting the upper left corner to the lower right corner is:

- A. `canvas.drawLine(0, 0, 0, 0)`
- B. `canvas.drawLine(0, 0, 200, 400)`
- C. `canvas.drawLine(200, 400, 400, 200)`
- D. `canvas.drawLine(400, 200, 0, 0)`

Section	2.6.2 Lines and Polygons
Title	Draw a diagonal line on a canvas
type	mc
section	2.6.2 Lines and Polygons
id	testbank-py-1-ch02-91

101. The statement that sets the fill color to red is:

- A. `canvas.setFill(0, 128, 0)`

- B. `canvas.setFill(64, 0, 128)`
- C. `canvas.setFill(64, 255, 64)`
- D. `canvas.setFill(128, 0, 0)`

Section	2.6.3 Filled Shapes and Color
Title	Which statement sets the fill color to red?
type	mc
section	2.6.3 Filled Shapes and Color
id	testbank-py-1-ch02-92

102. Which of the following statements draws a circle?

- A. `canvas.drawOval(100, 200, 100, 200)`
- B. `canvas.drawOval(200, 100, 200, 200)`
- C. `canvas.drawOval(200, 200, 100, 200)`
- D. `canvas.drawOval(200, 200, 200, 100)`

Section	2.6.4 Ovals, Circles and Text
Title	Which statement draws a circle?
type	mc
section	2.6.4 Ovals, Circles, and Text
id	testbank-py-1-ch02-93