

Variable & Math Calculations

1. Circle variable names which are not legal in Python. Explain why?

total result → space not allowed	my5Numbers	numberOfBooks
3rdLine → cannot start with a number	first-guess	classICS20
veryLooooooooongVariableNameJustVeryVeryLooooooooooooooooooooooooongOne		
Les Échos → French accent	amount\$ → dollar sign not allowed	max_value
Min → cannot start with uppercase	aver.val → a period is not allowed	class → python language

2. For the following questions, if it has errors or cannot be executed, write "Error", otherwise write the result of the output.

- 1) `print(type(15))` Output: <class 'int'>
- 2) `print(type("hello"))` Output: <class 'str'>
- 3) `hello = 12`
`print(type(hello))` Output: <class 'int'>
- 4) `print(type(True))` Output: <class 'bool'>
- 5) `print(type(5.5))` Output: <class 'float'>
- 6) `print(type(12//27))` Output: <class 'int'>
- 7) `print(type(3/27))` Output: <class 'float'>
- 8) `print(type(2.0/1))` Output: <class 'float'>
- 9) `a = str((-4 + abs(-5) / 2 ** 3) + 321 - ((64 / 16) % 4) ** 2)`
`print(type(a))` Output: <class 'str'>
- 10) `print(type((int)"5.1"))` Output: Error
- 11) `print(type((float)(5)))` Output: <class 'float'>
- 12) `print(type((int)(5.1)))` Output: <class 'int'>
- 13) `print(type((str)(5)))` Output: <class 'str'>
- 14) `print(type((str)(5.1)))` Output: <class 'str'>
- 15) `print(type((float)("5.1")))` Output: <class 'float'>
- 16) `print(13 + 6)` Output: 19
- 17) `print(2 ** 3)` Output: 8
- 18) `print 2 * (1 + 3)` Output: invalid syntax
- 19) `print ("Hello" / 123)` Output Error
- 20) `print(3 / 9)` Output: : 0.3333333333333333
- 21) `print(3 // 9)` Output: 0
- 22) `print("13" + "6")` Output: 136
- 23) `print("Hi" + 5)` Output: Error
- 24) `print("Hi", 5)` Output: Hi 5
- 25) `print("13" + 6)` Output: Error
- 26) `print(5 + 7)` Output: 12
- 27) `print(16**(1/2))` Output: 4.0
- 28) `print(8**(1/3))` Output: 1

29) `a = (3+4+21) / 7`
`print (a)` Output: 4.0

30) `b = (9*4) / (2+1) - 6`
`print(b)`
`b = b+5`
`print(b)` Output: 6.0, 11.0

31) `num1 = 6`
`num2 = 15`
`sum = num1 + num2`
`num2 = 4`
`print(number2, sum)` Output: Error: name 'number2' is not defined (if number2 was changed to num2 then the answers would be: 4 21)

32) `x = 7`
`x = 15`
`print (x)` Output: 15

33) `y = 8`
`3 = y`
`print (y)` Output: Error

34) `1stNum = 9`
`2ndNum = 2.5`
`print (1stNum ** 2ndNum)` Output: Error

35) `num = 5`
`word = "La- "`
`print (word * num)` Output: La- La- La- La- La-

36) `x = 3`
`y = 10`
`y = x`
`print("values are: ", x, y)` Output: values are: 3 3

37) `delimiter = '.'`
`print (delimiter *5)` Output: