

assignment 1

May 25, 2023

1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

- 'hello' -87.8
- /
- 6

ANS: The values are : 'hello' , -87.8 , 6 The expressions are - , / , + , *

2. What is the difference between string and variable?

ANS: Strings - they are sequences of character data which are created by enclosing characters in quotes. for example: 'spam' variable- A Variable is a store of information.A variable can hold a string but a string can't hold a variable. for example: spam

3. Describe three different data types.

ANS:a.Numeric , b. Dictionary , c.Boolean

a.NUMERIC-The numeric data type represents the data that has a numeric value.They are further defined as integers,floating point, complex. b. DICTIONARY-A dictionary is created by placing items (key-value pairs) inside curly braces, separated by commas.the key is separated from the value by colon. c.Boolean-Data type with one of the two built-in values, True or False.To return the result, operator like and,or,not,etc. are used.

4. What is an expression made up of? What do all expressions do?

ANS:An expression is a combination of values, variables and operators that is interpreted to produce some other value.

for example: a = 13

b = 12.0

c = a + int(b)

print(c)

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

ANS:An expression is a combination of values, variables, operators, and calls to functions that evaluates to a value. A statement in Python is a logical instruction that the Python interpreter can read and execute. for example spam + 10 is an expression that evaluates to a value, whereas spam = 10 is an assignment statement that indicates a value to a variable.

6. After running the following code, what does the variable bacon contain? `bacon = 22` `bacon + 1`

ANS: The variable bacon contains the value 23

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[1]: bacon = 22
      bacon + 1
      print(bacon + 1 )
```

23

7. What should the values of the following two terms be? `'spam' + 'spamspam'` `'spam' * 3`

ANS: Both terms contain the same value 'spamspamspam'. Both expressions evaluate to string

8. Why is `eggs` a valid variable name while `100` is invalid?

ANS: Variable names cannot begin with a number. For eg: `100eggs`, `100e` is an invalid variable whereas `eggs100`, `e100` is a valid variable.

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

ANS: `int()`, `float()`, `string()`

10. Why does this expression cause an error? How can you fix it? `'I have eaten' + 99 + 'burritos.'`

ANS: The expression causes an error because 99 is an integer, and only strings can be concatenated to other strings with the `+` operator. The correct way is: `'I have eaten' + str(99) + 'burritos.'`

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[ ]:
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