Assignment 1

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

Expression = \*

Values ='hello'

Values -87.8

Expression - /

Expression +

Values 6

2. What is the difference between string and variable?

Ans : A string is a sequence of characters, while a variable is a named location in memory that can hold a value.

A string can be stored in a variable, but a variable cannot be stored in a string.

3. Describe three different data types.

Answer

Integer: An integer is a whole number, positive or negative. Examples of integers are 2,8 , -10, and 0.

Float: A float is a number with a decimal point. Examples of floats are 3.14, 1.2345, and -0.5.

String: A string is a sequence of characters. Examples of strings are "hello", "world", and "12345".

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

An expression in programming is a combination of one or more constants, variables, operators, and function calls that can be evaluated to produce a value

All expressions, when evaluated, produce a value. This value can be of various types, such as numbers, strings, Booleans

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 function calls that can be evaluated to produce a single value.

Like x\*y

A statement is a complete instruction that performs some action, produces an effect, or controls the flow of the program.

like spam = 10.

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

23

7. What should the values of the following two terms be?

'spam' + 'spamspam'

Ans : 'spamspamspam'

'spam' \* 3

Ans

'spamspamspam'

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

Ans : Any number cannot be variable As variable starts with any character or\_

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

Answer : int

Float

Str

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.'

Concatenation will be done for only string but it can’t be for integer

It can be fixed by removing integer 99

'I have eaten ' +' burritos.'