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.

|  |  |
| --- | --- |
| \* | expressions |
| ‘hello’ | values |
| -87.8 | values |
| - | expressions |
| / | expressions |
| + | expressions |
| 6 | values |

2. What is the difference between string and variable?

Ans. String is a datatype which represents the text or characters f.ex. “This is a string”.

Variables – Variables are use to store any value of any datatype. F.ex. name = “Digvijay”. Here ***name*** is a variable which store the value of type string and the value is “Digvijay”

3. Describe three different data types.

Ans. String, integer, Boolean

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

Ans. Expressions contains two or more values with a operator in between them to evaluate to return a result. F.ex 2\*4=8

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

Ans. In the given statement the value is being stored in the variable spam. Statement is a line which performs certain action/task. Whereas an expression on execution always returns a result of that line.

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

bacon = 22

bacon + 1

Ans. 22, first line is an assignment statement which sets value of bacon to 22, next line is an expression which adds 1 to bacon (which is 22) but this does not change the value of bacon. Hence bacon remains 22.

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

'spam' + 'spamspam'

'spam' \* 3

Ans. Both return the same result. The first concatenates the ‘spam’ to ‘spamspam’

Which return ‘spamspamspam’. The second concatenates the spam 3 times which also returns ‘spamspamspam’.

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

Ans. Variable name always starts with a character. 100 is a value and starts with numeric.

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

Ans. Int() – parse to integer value, float() – parse to floating point number, str() – to parse to string.

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

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

Ans. 99 is an integer and cannot concatenate with string. To fix that 99 must be converted to string using str() function. 'I have eaten ' + str(99) + ' burritos.'