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

**Answer:** ‘hello’, -87.8 6

2. What is the difference between string and variable?

**Answer:** String is a data type and variable is storage location that holds some data. A variable can be of type string.

3. Describe three different data types.

**Answer:**

Three data types are –

int: holds signed integers of non-limited length

float: holds floating precision numbers and it’s accurate up to 15 decimal places.

str: The string is a sequence of characters. Python supports Unicode characters. Generally, strings are represented by either single or double-quotes.

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

**Answer:**

An expression is made up of Operator and Operand.

Expression are evaluated or interpreted to produce a value.

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

**Answer:**

Expressions only contain identifiers, literals and operators. Whereas each line of a program is a statement. Every expression is a statement but all statements may not be an expression.

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

bacon = 22

bacon + 1

**Answer:** 22

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

'spam' + 'spamspam'

'spam' \* 3

**Answer:**

spamspamspam

spamspamspam

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

**Answer:**

According to python variable name rule, a variable name cannot start with a number. So eggs is valid but as 100 starts with a number it’s not a valid variable name.

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.'

**Answer:**

Concatenation of number with a string is not allowed. The problem will be fixed if we can convert 99 to a string.

'I have eaten ' + str(99) + ' burritos.'

Or

'I have eaten ' + ‘99’ + ' burritos.'