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.

\* - expression

'hello' - value

-87.8 - value

- - expression

/ - expression

* - expression

6 - value

2. What is the difference between string and variable?

String is a sequence of characters ex: “ineuron”

Variable is container for storing data value. Ex: x=4

3. Describe three different data types.

Numeric Type: int, float

Sequence Type: list, tuple

Boolean Type: bool

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

An expression is a combination of operators and operands that is interpreted to produce some other value.

EX:

X=2+2

4

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

expression is a combination of values and functions that are combined and interpreted by the compiler to create a new value

statement which is just a standalone unit of execution and doesn’t return anything.

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

bacon = 22

bacon + 1

bacon = 23

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

'spam' + 'spamspam'

'spam' \* 3

spamspamspam

spamspamspam

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

Rules for Python variables:

* A variable name must start with a letter or the underscore character
* A variable name cannot start with a number
* A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and \_)
* Variable names are case-sensitive (age, Age and AGE are three different variables)

variable name must start with a letter or the underscore character. So eggs a valid variable name and 100 is invalid

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

 int() function converts the specified value into an integer number.

float() returns a floating-point number.

str() Return a string object

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

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

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