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' = values

-87.8 = values

- =Expression

/ =Expression

* =Expression

6 = values

2. What is the difference between string and variable?

Ans: String – string is the sequence or list of characters.

Variable – variable is the named location that is used to store data in memory, it is the combination of uppercase, lowercase, underscore and integers.

3. Describe three different data types.

Ans : 1) Numerical data type - int, float ( holds numerical values)

Example- int = 3, float = 3.5

2) String data type – str (holds the sequence of characters)

Example -str = “hai”

3) List– a list is an ordered collection of items (mutable). Items are enclosed by [ ].

Example- number=[2,3,4,5]

4) Tuple – a tuple is an ordered collection of items(immutable). Items are enclosed by ().

Example- numbers=(3,4,5)

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

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

Example = A+b # This is an expression

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

Ans: Statement = Statements are the logical instruction that the Python interpreter can execute.

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

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

bacon = 22

bacon + 1

Ans = 22

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

'spam' + 'spamspam'

'spam' \* 3

Ans: 'spam' + 'spamspam' = ‘spamspamspam’

'spam' \* 3 = ‘spamspamspam’

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

Ans: Variable names should start with letters or an underscore.

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

Ans: integer = int(), floating-point number = float(), string = str()

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

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

Ans: When concatenating strings don’t keep integers, all the values should be integers.

We can fix it - 'I have eaten ' + ‘99’ + ' burritos.'