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?

string : A string is a type of information which are used to be stored inside a variable.

variable : It is an entity which holds the information.

3. Describe three different data types.

Mapping type : This data type uses dictionary as dict, for the mapping of a key to its values.

Text type : This data type uses string as str for the text variables.

Numeric type : This data type uses numbers to be represented as int, float complex.

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

An expression is made up of operators and operands that produces a value.

An expression is a representation of value.

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

The difference between a statement and an expression is:

Assignment statement is spam =10, it just executes a command, no evaluation takes places.

Expression : Evaluates to a value and represents it.

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

bacon = 22

bacon + 1

The output of variable bacon is 23.

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

'spam' + 'spamspam' This gives value as ‘spamspamspam’

'spam' \* 3 This gives value as ‘spamspamspam’

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

Eggs is a valid variable name as it is a string, a string or characters can be used a variable name, but we cannot use numbers such as integers, floating points as the name of a variable and it is invalid.

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

int() – It can be used to get the integer version of a value.

float() – It can be used to get the floating point version of a value.

str() – It can be used to get the string version of a value.

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

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

This statement causes error because we cannot concatenate an integer to a string.

To fix it :

a = str(99)

'I have eaten '+ a + ' burritos.'

Output :

'I have eaten 99 burritos.'