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 (mathematical operator-multiplication)

'hello' --- value as string

-87.8 --- value as float

- --- expression (mathematical operator-subtraction)

/ --- expression (mathematical operator-division)

+ --- expression (mathematical operator-addition)

6 --- value as integer

2. What is the difference between string and variable?

A string is written in single or double quotes. Whereas a variable is an element which stores the value (int,string,folat,bool).

3. Describe three different data types.

Data types: Numeric – int, float, complex

Booloean – bool

Sequence – list, tuple, string, range, bytes, bytearray

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

A combination of operands and operators are called as expression. The expression in Python produces some result after being interpreted by the Python interpreter.

Eg: a=a+5

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

Spam=10 is a statement as spam is a variable which storing a value 10 in it.

Whereas expression performs operation using operators and operands and produces some results.

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

bacon = 22

bacon + 1

Ans: 23

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

'spam' + 'spamspam'

'spam' \* 3

Ans: ‘spamspamspam’

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

Egg is a variable and 100 is a value assign to a variable.

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

Ans: int(), str(), float() are three version of value.

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

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

Ans: Error – concatenation is applicable to string not to an int.

Here, int is specified. So to fix this, we can use typecasting—converting int to str in order to get the result.

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