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' : - **string**

-87.8 : - **float**

- : - **expression**

/ : - **expression**

* : - **expression**

6 :- **integer**

2. What is the difference between string and variable?

Ans: - Variables are used to store data while strings are set variables.

3. Describe three different data types.

Ans:-

1. Integer: Generally these are whole numbers. E.g. 1,2,3,4,5,….etc
2. Float: These are the numbers consists of decimal point e.g. 4.3, 6.4, … etc
3. Complex Number: These consists of one real & one imaginary number e.g. 4+5i.
4. Boolean: This data types have only two values True or False.

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

Ans:- Expression is made up of operators and operands that is interpreted to have some useful value.

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

Ans:- Expression evaluates a value while statements represent a motion or command

e.g Print etc.

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?

Ans:- We can assign some values to eggs however as 100 is an integer we can not assign any values to it.

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

Ans:-

* Int(), e.g. int(13.25)🡪 13
* Float(), e.g. float(12) 🡪12.0
* Str(), e.g. str(123456) 🡪 ‘123456’

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

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

Ans:- Only strings will be concinnated hence above expression will give an error.

'I have eaten ' + ‘99’ + ' burritos.' 🡪 'I have eaten 99 burritos.'