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?

Variable is basically a store of value/information and string is one of datatype we have in python which is usually text enclosed in quotes(single/double). Variable can be assigned string/int/float etc

3. Describe three different data types.

String = text enclosed in quotes(single/double ) eg. “Manpreet”

Float = numbers with a decimal. Eg: 5.5, 7.5,9.5

Integer = represent round numbers as value. They do not have decimal like float. Eg: 5,3,4,6,7,9

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

Expression is made up of operator(like +,-,\*,/) and operands(10,x,y). they are evaluated to produce some result/value

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

Expression is designed to produce some value and statements is a line/s of code which instructs to perform some action, like print(“Manpreet”) or in our question assignment statement which assign int value 10 to spam

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

bacon = 22

bacon + 1 = **23**

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

'spam' + 'spamspam' = ‘spamspamspam'

'spam' \* 3 = ‘spamspamspam'

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

As per rules of python variable a variable cannot start with number so 100 is invalid.

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

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.'

Error because cannot concatenate integer and strings.

Solution: 'I have eaten ' + str(99) + ' burritos.' . we need to convert 99 to string type