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.

\*

'hello'

-87.8

-

/

6

Ans: \* , - , / and + are mathematical operator(expression) whereas 'hello' , -87.8 and 6 are values

2. What is the difference between string and variable?

Ans: string is a datatype and variable is a reference where a datatype is stored.

E,g. X=’thriller’ , here X is variable and ‘thriller’ is of string datatype

3. Describe three different data types.

Ans: a) Text Type (str): stores data in a string format and can include any letters, symbols or numbers. E,g. X=’thriller’

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

Ans: An expression is made up of a sequence of operands and operators. It is used to combine data and give a certain output.

E.g, 4+5-6, here 4,5,6 are operands and +,- are operator

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

Ans: An Expression always evaluates a value whereas a statement does something like printing values, creating variables etc.

Spam = 10 is a statement where we are assigning value to a variable.

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

bacon = 22

bacon + 1

Ans: It contains 22 as we haven’t stored bacon+1 to bacon again.

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

'spam' + 'spamspam'

'spam' \* 3

Ans: both will fetch same result ‘spamspamspam’

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

Ans: As per python variable naming convention, variable name should start with a letter or underscore character

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

Ans: int() , float() and str()

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

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

Ans: String and int types cannot be concatenated. Correct code should be

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