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 Integer

- Expression

/ Expression

* Expression

6 Integer

2. What is the difference between string and variable?

:- String is value whereas variable is place which stores address of that value.

3. Describe three different data types.

:- str - String(str) is a continuous set of characters. eg. “Hello Word”

list - Python list contains data items separated by comma and enclosed within [ ].

It can hold data items of different data types. eg. [“a”, 10, 1.5, ”Hello”]

dict - Dictionary(dict) in python are kind of hash tables consisting key-value pair enclosed in curly braces { }

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

:- Expression is made up of operators and operands eg. y = x+10. Expressions are used for evaluation.

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

:- Expressions are evaluated whereas statements are not evaluated.

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

bacon = 22

bacon + 1

:- 22 (Value of bacon is not getting updated here)

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?

:- one of the rules for variable names is that they can not be started with integers.

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

: int(),float(),str() these are the functions

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

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

:- strings can only be concatenated with strings. To fix above expression number should be converted to string by str() function or enclosing it with “”