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:

\* -> expression

'hello' -> value

-87.8 -> value

- -> expression

/ -> expression

* -> expression

6 -> value

2. What is the difference between string and variable?

Ans: string is basically sequence of characters held within single quotes, double quotes, triple quotes in python. “python”, “left-right”, ’26 characters’ are some of the examples.

Variable is reserved memory location to store values. We can assign list, numbers, characters, words, tuple, strings, dictionary to a variable. For example: a=34, test = “test1” etc

3. Describe three different data types.

Ans: String (str), dictionary (dict), list, integer (int), tuple, set.

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

Ans: An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value. Expressions are interpreted to product some other values. For example, + is addition expression and can be used as ‘a’ = 15+3, then value of ‘a’ would be 18

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

Ans: Expressions evaluates to a value but statement is like creating a variable, or storing a value.

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

bacon = 22

bacon + 1

Ans: 22

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

'spam' + 'spamspam'

'spam' \* 3

Ans: 1st term -> spamspamspam

2nd term -> spamspamspam

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

Ans: Numerical values does not act as a variable but a string can

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

Ans: 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.'

Ans: By converting 99 into string character

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