1. In the below elements which of them are values or an expression? E.g. - values can be integer or string and expressions will be mathematical operators.

\*

'hello'

-87.8

-

/

6

ANS- Values (‘hello’, -87.8, 6)

Expressions (\*, -, /, +)

2. What is the difference between string and variable?

ANS- A variable is used as a reference to store a value which can be manipulated if needed, whereas a string is a type of variable mainly used for writing and reading and cannot be used for calculations. Strings are generally quoted with double or single quotes. They can contain numbers, alphabets, punctuations etc. String is a type of information stored in a variable.

3. Describe three different data types.

ANS-The basic data types supported by python are:

* Numeric which consists of integer numbers, floating-point numbers, and complex numbers,
* Sequence type which consists of lists, tuples, strings,
* Boolean value which contains True or False and
* Dictionary and sets

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

ANS- An expression made up of operators which is used to combine values and operators to put them together as a single value. They are evaluated and combined.

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

ANS – An expression is a combination of operators and values, it evaluates some value and a statement executes something and doesn’t return any value.

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

bacon = 22

bacon + 1

ANS- The variable bacon contains 22.

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

'spam' + 'spamspam'

'spam' \* 3

ANS – The value will be – ‘spamspamspam’

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

ANS- Because a variable name cannot start with a number. It is a rule in python.

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

ANS- Three functions are int( ), float( ) and str( ).

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

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

ANS- We can add single quotes (‘ ‘) to the integer 99. It causes an error because we cannot add a string value and an integer value together.