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: Values are ‘hello’, -87.8 and 6 whereas expressions are \* - / +

2. What is the difference between string and variable?

Ans: String is a data type whereas variable is something which holds a value and represents something, which could be a string too.

3. Describe three different data types.

Ans: Three different datatypes are- String, Integer and Float

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

Ans: Expressions are mathematical operators which help us perform mathematical operations like sum, multiplication, division, etc

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

Ans: An expression helps us perform mathematical operations whereas a statement is a line which may contain any other data types together.

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

bacon = 22

bacon + 1

Ans: 22. This is because bacon+1 is not assigned to the variable, bacon. Which is why the value is not updated.

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

i. ‘spam’+’spamspam’

ii. ‘spam’\*3

Ans: i. ‘spamspamspam’

ii. ‘spamspamspam’

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

Ans: A variable name cannot begin with an integer. It should always begin with a string. Hence eggs are a string, so it is valid whereas 100 is an integer, hence this is invalid.

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

Ans: To get integer- .int

To get float- float()

To get string- .str

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

‘I have eaten’ + 99 + ‘burritos’

Ans: This will result in the data type error. As two different data types cannot be concatenated. Hence, the following is the way to fix it-

‘I have eaten’ + ‘99’ + ‘burritos’