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: All the above

2. What is the difference between string and variable?

Ans: String is a dataype whereas variable is a reference name given to identify and store data which will be used in the program/application.

3. Describe three different data types.

Ans: Integer(To store whole number data), String(Can store alpanumeric), Float(To store decimal value data)

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

Ans: An expression is made up of LHS and RHS which is separated by equality or logical operator. Which on evaluation will either assign value (eg. X=10) or evaluate to a Boolean value to be used for decision making [if(x=10)] .

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

Ans: Here, we are variable named spam which points to the reference to the location which stores the value 10.

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: ‘spamspamspam’ and ‘spamspamspam’

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

Ans: As per the naming conventions allowed a variable name should start with alphabet and can contain numbers and allowed special characters but does not allow first character to be numeric. Also when looked logically assigning 100 = 10, is not correct and can mislead.

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(). These are in-built functions provided by python for converting from one datatype to another.

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

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

Ans: The interpreter throws error when concatenating integer to string value.

The error can be resolved by encapsulating 99 within ‘’.

'I have eaten ' + ‘99 + ' burritos.'