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'(value)

-87.8(value)

- (expression)

/ (expression)

* (expression)

6(value)

2. What is the difference between string and variable?

String is a value representing text, whereas a variable is a name that can store or refer any value.

3. Describe three different data types.

1. Numeric, under numeric it have integer, float and complex number.
2. Boolean denoting True or False
3. Sequence Type consisting of list,set,tuple,string.

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

Ans. An expression is a combination of operators, constants and variables. An expression may consist of one or more operands, and zero or more operators to produce a value.

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

Ans. Expression : In Computer Science, when we talk about expressions, we’re referring to anything that can be evaluated to produce a value.

Statement: In contrast, statements do not return anything. Instead, they perform an action which introduces some form of state.

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: 'spam' + 'spamspam'= ‘spamspamspam’

‘spam’\*3=’spamspamspam’

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

Ans. No variable name can start with number that’s why 100 is not a valid variable name, whereas eggs is just a normal string with alphabets hence it is a valid variable name.

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

Ans. For integer=int(value)

for float=float(value)

for string=str(value)

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

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

Ans. It’s showing error because we are trying to concatenate a string with an integer data type. It can be solved by:

'I have eaten ' +str( 99) + ' burritos.'