**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.**

\* -> This is an expression.

'hello' -> This is String value.

-87.8 -> This is Float Value.

- -> This is an expression.

/ -> This is an expression.

* -> This is an expression.

6 -> This is Integer value.

**2. What is the difference between string and variable?**

Ans:

STRING: Anything we assign to a variable using quotes(single or double) will be considered as a string.

Example: a='10'

VARIABLE: Variable is an identifier to store a value in a memory location and to manipulate it if needed.

Example: a=10

Above example, we can say that a is a variable that stores the value 10.

**3. Describe three different data types.**

Ans: Data types:

1. Numeric
2. Dictionary
3. Boolean
4. Set
5. Sequence Type

**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:

 If we assign it to a variable, it’s an expression. If we can’t, it’s a statement.

Ex: Expression : 2+4,3\*4

Statement : print 42

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

**bacon = 22**

**bacon + 1**

Ans: 23

**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: Because variable names cannot begin with a number.

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

Ans: int()

float()

str()

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

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

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

Since 99 is integer we have to convert this into string.