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.

\*

**Ans: - \* is Arithmetic Operator used to perform multiplication**

'hello'

**Ans: - ‘hello’ is string with single quotes**

-87.8

**Ans: -87.8 is an integer**

-

**Ans: - is Arithmetic Operator used to perform Subtraction**

/

**Ans: / is Arithmetic Operator used to perform Division**

+

**Ans: + is Arithmetic Operator used to perform Addition**

6

**Ans: 6 is an integer**

2. What is the difference between string and variable?

**Ans: A string is a set of special characters inside the single or double quotes, whereas the variable is special name given to particular object**

3. Describe three different data types.

**Ans: int, float: - these are used for numeric data types**

**list, tuple: - these are used to make list in an order, list is mutable, uses square brackets and tuple are immutable, uses parenthesis**

**dict: - dictionary is where data is added in form of a key and its value, it uses curly braces {}.**

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

**Ans: expression is a combination of variables, integers and various operators data representation**

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

**Ans: - expression is the representation of data through the use of variable, integers, operators, etc. whereas statement is the instruction that the interpreter can read to perform the given action**

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

bacon = 22

bacon + 1

**Ans: -** bacon = 22

bacon + 1

print(bacon + 1)

Result: - 23

bacon = 22

bacon + 1

print(bacon)

Result: - 22

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

'spam' + 'spamspam'

'spam' \* 3

**Ans: -** 'spamspamspam'

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

**Ans: - variable name should start with an alphabet or \_ and 100 is integer so python reads it as integer and doesn’t allow to use it as 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, floating point number- float and for string- str ()**

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

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

**Ans: - 99 in above code is an integer so all values cannot be linked together so all values need to be strings in order to code to be correct.**

**Correct code: -** 'I have eaten ' + '99' + ' burritos.'