**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**

***Answer:***

Expression: \*, -, /, +

Values: ‘hello’, -87.8 , 6

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

***Answer:***

String is a data type which have a set of character which contain alpha-numeric and special character written inside the single and double quotes it’s a immutable which store in variable.

Variable is a name refer to memory that store some data of different data type.

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

***Answer:***

String: string is an set of character which mention inside dingle/double quote can store the alpha-numeric value it is a immutable.

Int: integer is an datatype that store the numeric value, it is immutable data type

Float: Folat is an real number with decimal point. It can also have the value in scientific value for positive and negative number

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

***Answer:*** Expression is made up of operator to evaluate an expression like: Athematic, Logical, Bitwise expression

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

***Answer:*** spam=10, it is an statement use to initialize the variable or store certain data into variable and access it later, where as expression is used to evaluate the expression/equation/condition

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

**bacon = 22**

**bacon + 1**

***Answer:*** 23

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

**'spam' + 'spamspam'**

**'spam' \* 3**

***Answer:*** spamspamspam

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

***Answer:*** There are some rules defined in python for variable, if variable name start with character, \_. It can`t start with number. Hence, eggs is valid variable and 100 is invalid

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

***Answer:***

Int(): function is used to convert number to int value which process a positive and negative number but ignore if any decimal number

Float(): function is used to convert a floating point number to float data type

Str(): function is used to convert a value to string data type

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

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

***Answer:*** Above expression will give the TypeError here we try to combine string and int, which is not possible to fix this we can convert 99 from int to string ‘99’

‘I have eaten’ + ‘99’ + ‘burritos.’