1. In the below elements which of them are values or an expression? e.g. :- values can be integer or string and expressions will be mathematical operators.

\*

'hello'

-87.8

-

/

6   
**Ans :- Values are – ‘hello’, -87.8 & 6**

**Expressions are - \*, -, /, +**

2. What is the difference between string and variable?  
**Ans :- String - A string is any series of characters that are interpreted literally by a script. For example, "hello world" and "MK012345" are both examples of strings.  
  
Variable - A variable is any characteristics, number, or quantity that can be measured or counted. A variable may also be called a data item. Age, sex, business income and expenses and vehicle type are examples of variables.**

3. Describe three different data types.

**Ans :- There are multiple data types and we use like numeric, string, and Boolean types that are built into Python.  
A) Numeric : There are two categories of numeric data types: exact and approximate. Exact data types include integer data types and decimal data types. Approximate data types include floating point data types.  
B) String : A string is any series of characters that are interpreted literally by a script. For example, "hello world" and "MK012345" are both examples of strings.  
C) Boolean type: Python, which represents one of the two values i.e. True or False. Generally, we used to represent the truth values of the expressions.**

4. What is an expression made up of? What do all expressions do?  
**Ans :- An expression is a construct made up of variables, operators, and method invocations, which are constructed according to the syntax of the language, that evaluates to a single value.**

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

**Difference - An expression is any legal combination of symbols that represents a value. For example, 3.1, a + 5, (2 + 5) / 4. A statement is a programming instruction that does something i.e. some action takes place. For example: print("Hello")**

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

bacon = 22

bacon + 1

**Ans :- bacon + 1 = 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 :- Eggs are valid variable because python does allow Variable names may contain letters, digits (0-9) or the underscore character \_ . While 100 is constant and can’t be changed.**

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

**Ans :- The int() , float() , and str( ) functions will evaluate to the integer, floating-point number, and string versions of the value passed to them.**

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

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

**Ans :- We can’t add string with integer because we will get after coding can only concatenate str (not "int") to str, but after adding (“,”) double inverted comma then we can get "I have eaten ' + 99 + ' burritos."**