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?

A variable is like a box where values are stored. Basically, it is the used to store an information.
Whereas, a string is a type of information/data type which is expressed inside a single or double quote.
For example:
A = "Vivek"
B = '2'
C = "abc$"

In the above example A, B & C are variables which are used to store the values written inside single or double quote. These values are string type values/data type.

3. Describe three different data types.

There three different type of data types are:
1. Numeric data types:
    int – It accepts integer values eg. 2, 3, 4, 88, etc.
    float – It accepts decimal values eg. 2.0, 33.87, 99.89, etc
    complex – It is combination of real & imaginary nos. eg. 3+4j, 98+67j, etc.
2. String data types:
    str – It accepts values in single or double quotes eg. "Vivek", '123', 'vivek99', "vivek89%$", etc
3. Boolean type:
    bool – It contains either true or false as the value

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

Expressions are combination of operands and operators. It is used to produce some value or result as a result of operation.

Examples:
a = a/2
a = len("Vivek")

Expressions used symbols for performing operations. The different type of expressions are:
+ "It is used for addition"
- "It is used for subtraction"
* "It is used for multiplication"
/ "It is used for division"
% "It is modulo operator used to find remainder"

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

An assignment statement is nothing but a way storing a value in a variable whereas an expression is used to perform an operation by using a combination of operator and operand.

For example:
A = "Vivek" *(Assignment Statement)*
B = 25 *(Assignment Statement)*

C = A + "Kumar" *(Expression)*
D = B * 5 *(Expression)*

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

bacon = 22
bacon + 1

After performing the above operation variable bacon will contain an integer value 23.

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

'spam' + 'spamspam'
Above code will give 'spamspamspam' as output

'spam' * 3
Above code will give 'spamspamspam'

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

Python can only contain variable name starting with text character/string, for example **eggs** or **egg100** but variable names are not allowed to start with a number as numbers are literals and literals cannot be assigned as variable name in python.

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

The int(), float(), and str() functions are used 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.'

The above expression is trying to add/concatenate two different data types i.e. string & integer and hence it is giving the error. Only similar data types are allowed to be added.