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: Values are: 'hello', -87.8 , 6 and expression are : \* , - , / , +

2. What is the difference between string and variable?

Ans : Strings:

1. These are identifiers with sequence of letter which might include underscore ’\_’, number space etc.

2. These are represented in a opening and closing single quote(‘ ’) and double quotes(“ ”).

3 .We have to use ‘str’ keyword to create String datatype values.

4. This is type of varible, which stores with sequence of letter.

5 . If we try “+’ add two string , they will do concantenation and give the ans;

Eg: x=’20’

y=’40’

Print(x+y) ---- this will give 2040

Varibles:

1. These are the identifier which is used to store numberical type of value that can be of data type Integer, Compelx etc.
2. These do not requires any keywords to declare in most of the case as Python complier explicitly understands that.
3. Can be used for mathematical operations to performe
4. Eg: x=20
5. y=40
6. Print(x+y) ---- this will give 60

3. Describe three different data types.

Ans : 1. Integer : represents the whole numbers (+ve or -ve)

e.g. num = 100

myvar = -10

2.float: represents a value with decimal.

e.g.

salary = 10.60

3.bool:Represents boolean value and can contain one of the two values [True/False]

Eg: myvar= True

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

Ans: Expression is made of two homogenous data type along with a mathematical operator and they are used to a mathematical operation to perform .

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

Ans: Expression contains a Mathematical operator for a mathematical operation to perform while a statements is used for Assigning so vaules, of defining them

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

bacon = 22

bacon + 1

Ans: bacon =22

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

'spam' + 'spamspam'

'spam' \* 3

Ans 1: 'spam' + 'spamspam'----- o/p : spamspamspam '

2: 'spam' \* 3---------o/p: 'spamspamspam'

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

Ans : As Variable name cannot start with a numerical Value so is eggs a valid variable name while 100 is invalid.

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

Ans : Int , float, str are three functions respectively that can be used to get the integer, floating-point number, or string version of a value.

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

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

Ans: **TypeError**: can only concatenate str (not "int") to str

This mean we can’ t concatenate operation on with int type value .