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.

\* - its mathematical expression mutliplier

hello' – it is string

-87.8 – it is floate

- Nn – its is strings

/ - mathematical expression for division

+ - mathematical expression plus

6 – number in maths

2. What is the difference between string and variable?

String are a data which we can use to fill up the variable # example a = 10 where 10 is a string

Variable are symbol that you can use to store data in a programme # example x = 20 in where x is a variable.

3. Describe three different data types

first data type is dictionary : its an unordered collection of items e.g.person = {"name" : "tom", "percentage" : 88}

seond data type is list : its an oreder or the colletction of items e.g, fruits = ["Apples", "Bananas", "Grapes"]

third data type is tuple : its an order or the collection of items which are unmutable once its declard e.g.mytuple = (1, 2, 3, 4, 5 )

4. What is an expression made up of? - expression is a combination of values, variables , operators, and calls functions.

What do all expressions do? - Expression are representation of value. Expression in python produces some value or result

After being interpreted by python interpretatior.

example;

A = 10 # A is a statement

A = A + 10 # it’s an expression

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

A statement is used for creating variable or for displaying value. Example spam = 10 it’s a statement

Expression are representation of value. Expression in python produces some value ,

spam = b - 20 it’s an expression

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

bacon = 22

bacon + 1 = 23 # variable bacon contains 22

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

'spam' + 'spamspam' = 'spamspamspam'

'spam' \* 3 = 'spamspamspam'

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

Eggs is valid variable name because variable can start with alphabets

100 is invalid as per variable cannot start with numerical value

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

x 10 is an integer

x = 10.50 is an floating - point number

x = "Alice" it is an string value

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

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

its is causing error because 99 is an integer and only string can be link together to other string with the + operator.

Correct way is 'I have eaten' + str(99) + 'burritos.'