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' 🡪 Values

-87.8 🡪 Values

- 🡪 Expression

/ 🡪 Expression

* 🡪 Expression

6 🡪 Values

2. What is the difference between string and variable?

A Variable is a store of information, and a String is a type of information you would store in a Variable.

3. Describe three different data types.

Integer :- This value is represented by int class. It contains positive or negative whole number. In Python there is no limit to how long an integer value can be.

Float :- This value represented by float class. It is a real number with floating point representation. It is specified by decimal point.

Complex numbers :- Complex number represented by complex class. It is specified as (real part ) + (Imaginary Part).

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

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?

Expression is made up of values, containers, and mathematical operators and the statement is just like a command that a python interpreter executes like print.

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

bacon = 22

bacon + 1

it gives 23 as execution code

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

'spam' + 'spamspam'

'spam' \* 3

it will be the same(spamspamspam)

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

Because we can't start giving variable an integer name. if we, we should begin with, a string-like alphabet name then integer. e100 or eggs100 is valid.

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

int(), float(), str()

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

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

'I have eaten' + 99 + 'burritos'

Because 99 is an integer it cannot be concatenated with strings, if we have to concatenate it we need to do typecasting