**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.**

\* —-----------------------------------------------> Value

‘hello’ —-----------------------------------------------> Value

-87.8 —-----------------------------------------------> Value

- —-----------------------------------------------> Expression

/ —-----------------------------------------------> Expression

+ —-----------------------------------------------> Expression

6 —-----------------------------------------------> Value

**2. What is the difference between string and variable?**

A Variable is used to store the information, and a String is one of the many types of information we can store in a Variable.

**3. Describe three different data types.**

String → To store textual information or data.

Float → To store decimal values.

Int -> To store integer values.

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

An expression is a combination of operators and operands that is interpreted to produce some other value. In any programming language, an expression is evaluated as per the precedence of its operators.

Some of the examples of expressions are:

Constant Expressions: a = 12 + 13

Arithmetic expressions: a= 2, b=3; c = a+b

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

Expression refers to a piece of code that can be evaluated to a value and is composed of variables, operators, function calls, and literals.

Statement refers to a piece of code that executes a specific instruction or tells the computer to complete a task.

Every expression is a statement but not every statement can be an expression.In the above example spam = 10 is both an expression and a statement.

E.g import sys is a statement but not an expression.

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

bacon = 22

bacon +1

bacon will still contain 22 only.

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

**‘spam’ + ‘spamspam’**

**‘spam’ \*3**

Both of them will produce same output i.e spamspamspam

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

Because according to the python naming rules, variable names should start with letter(a-zA-Z) or underscore(\_). Anything else is just not supported by the python compiler.

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

int(),float() and str().

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

**‘I have eaten’ + 99 + ‘burritos’**

Because we cannot concatenate a string with an integer value.

Hence we need to convert 99 into a string either by using str() or quoting in single/double/triple quotes.