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?

Variable is like a name for location where some info/data is available,

String is type of data, that would store in a variable.

3. Describe three different data types.

**Int -** Integer value can be any length such as integers 10, 2, -1 etc. Python has no restriction on the length of an integer. Its value belongs to int

**Float -** Float is used to store floating-point numbers like 1.2, 3.4 etc. It is accurate upto 15 decimal points.

**complex -** A complex number contains an ordered pair, i.e., x + iy where x and y denote the real and imaginary parts, respectively. Eg: 4+6j

**string –** string stores sequence of characters in single quotes or double quotes

Eg: “ABC”

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

Expression is a combination of variables, values, operators, expressions provides a new result based on the operands and operators.

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

Assignment is a group of expressions or statements that you design to carryout a task or an action.

Spam, =, 10 are expressions, combining all together spam =10 is a statement

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

bacon = 22

bacon + 1

output: 23

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

'spam' + 'spamspam'

'spam' \* 3

Output: ‘spamspamspam’

Both will give same output

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

Because variable names cannot begin with number

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

Ans: int(), float(), str()

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

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

Ans: can’t concatenate string and int, that’s why failing.

If We can make that int 99 to string, then it will work

o/p: 'I have eaten 99 burritos.'