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.

Ans –

'hello' – Str Value

-87.8 – Float Value

- - Expression

/ - Expression

+ - Expression

6 – int Value

2. What is the difference between string and variable?

Ans -

|  |  |
| --- | --- |
| **String** | **Variable** |
| String is a type of information you would store in variable  Ex. X = “Hello World”  “Hello world” is string | A Variable is a store of information  X is variable where can store any type of information. |

3. Describe three different data types.

* Int - To store in integer value for ex. A =10
* Float – Store floating point numbers for ex. B = 2.5
* String – Used to represent text for Ex. C = “asdaf”
* Boolean -If an expression is True and False for ex. Print(10>9) O/P : True

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

Ans - An **expression** is a combination of values, variables, operators, and calls to functions.

**Expressions** need to be evaluated.

An **expression is** an instruction that combines values and operators and always evaluates down to a single value.

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

Ans - A statement performs some action such as printing values, looping, or if statement. On the other hand, expressions also produce values and we can assign these values to new variables.

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

bacon = 22

bacon + 1

Ans – Variable bacon contain value 23.

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?

Ans – Eggs - alphabets and alphanumeric can be variable name.

100 – Number cannot be variable name

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

Ans – int (), float (), str () functions can be used to get integer, floating-point no. and string.

For ex.

* int(124)
* float(12.3)
* str(“Hello”)

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

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

Ans –

1. Can only concatenate str (not "int") to str and given statement contain

both int and string so this expression cause an error.

1. We can write in expression like

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