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.

**Answer:**

\* : expressions

'hello' : value

-87.8 : value

- : expressions

/ : expressions

* : expressions

6 : value

2. What is the difference between string and variable?

**Answer:**

string is a constant value

variable : can store values that can be changed. cant be of different data types: int float string boolean

3. Describe three different data types.

**Answer:**

string,

numeric : integer float,

boolean

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

**Answer:**

expression has operand and operator. operator(\*+\_/) decide what operation or expression has to be applied on operand. Eg.

name = “siva”

name\*4 is an expression which gives “sivasivasivasiva”

name+name gives “sivasiva”

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

**Answer:**

expression computes the operation using operand and operator as explained in above answer. statement then assigns the result of expression to a variable.

name = siva

***statement***: name2 = name\*2

name2 is “sivasiva”

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

bacon = 22

bacon +

**Answer:**

23

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

**Answer:**

'spam' + 'spamspam' = 'spamspamspam'

'spam' \* 3 = 'spamspamspam'

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

**Answer:**

variable name can start with spring and not number

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

**Answer:**

int(), float(), str()

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

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

**Answer:**

cannot concatenate string and integer. convert integer to string and then concatenate shown as below

***correct***: 'I have eaten ' + str(99) + ' burritos.'