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.

\*

'hello'

-87.8

-

/

6

### Answer :

#### Following are operators:

#### \*,-,/,+

#### Following are values:

#### 'hello', -87.8, 6

2. What is the difference between string and variable?

### Answer :

- Variable is a name given to the memory location where the values is stored in the memory - avariables are containers

for storing data value, a python variable can take any values, like, int, float or string.

Example numA = 23, numB = 23.5, strVal = 'Ambar'

- String represents a text value enclosed with in two double quotes or two single quotes.

Example "Ambar", "Ambar0104"

3. Describe three different data types.

#### Answer: Three data types in python

- int - A positive or negative whole number without a decimal point. example a = 10

- floating point numbers - A positive or negative whole number with a decimal point. b = 10.5

- string - any text with in two single or double quotes. c = 'Bhanu878'

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

#### Answer:

- An Expression is a combination of variables and operators. There expressions perform operation of variable based on

the operators and evaluates the values to a single variable.

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

#### Answer:

- The assignemnt statemets assign a value to the variable.

- The expressions evalues the value to a variable.

- in spam = 10 , value 10 in assigned to spam, and now spam will have value 10.

- But in expression a = C+B, the value of a depends on the value of C and B.

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

bacon = 22

bacon + 1

#### Answer:

* becon will still have value 22.
* The becon is assinged with 22, but becon + 1 is not reassigned to becon again like, becon= becon + 1. So the value of becon is not changed

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

'spam' + 'spamspam'

'spam' \* 3

#### Answer: Both outputs 'spamspamspam'`

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

#### Answer:

- Variable name can not starts with numbers.

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

#### Answer: The following functions

- int()

- float()

- str() will convert the values to integer, float or string versions of the values passed to them

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

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

#### Answer:

- This will error out since string concatination with interger values can not be performed.

This can be fixed by converting 99 into string by str(99) e.g.

'i have eaten ' **+** str(99) **+** ' burritos.'