

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 :- Values - 'hello', -87.8, 6

Operators - *, -, /, +

2. What is the difference between string and variable?

String - It is a collection of characters or individual character that are called as string in python. This is one data type in python.

Variable - This is a storage container which will store whatever value we are giving and based on the further assignments it will vary from time to time.

E.g :- Var_1 = "Python"

In the above example, Var_1 is a variable and Python is a string data type which is enclosed by two double quotes. Here if we change the value of Var_1 to "English", then it will take that value and show us whenever we are calling that variable.

3. Describe three different data types.

INTEGER - Natural numbers from 0 to all numeric numbers.

FLOAT - All decimal numbers are called floats.

String - An individual character or collection of characters in python called a string in python which is initialized by single or double quotes.

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

Answer : - It is made up of variables, operators, values and it will produce some results after evaluating the expression.

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

Answer : - Statement will tell us like some variable contains some values where in expression will give us some result after doing the evaluation.

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

```
bacon = 22
```

```
bacon + 1
```

Answer : - 22

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

```
'spam' + 'spamspam'
```

```
'spam' * 3
```

Answer :- 1. spamsapamspam , 2. spamspamspam

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

Answer :- Variable name should not start with number or any other special character other than underscore. It is considered to have the numbers after characters(letters) in the variable.
E.g : eggs100 is valid variable

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

Answer :- convert into integer numbers - int()

convert into float numbers - float()

Convert into string - str()

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

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

Answer :- Python will not allow you to concatenate strings with integer. Hence we need to convert integer(type casting) to string to do the concatenation.

'I have eaten' + str(99) + 'burritos'.