

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 : *, -, +, /

Value : 'hello', -87.8, 6

2. What is the difference between string and variable?

Variable is an entity that stores data.

String is a datatype of a variable.

Example: a = "Sejal"

3. Describe three different data types.

Basic data types

1) String: Data type with an array of a characters

X = "Hello World"

2) Integer: Data type that represents negative and positive values and it is represented by int class.

X = -78

3) Float: Data type that represents the real numbers and is written in a decimal point dividing the integer and fractional parts.

X = 78.5

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

An expression is made up of a values and variable. Example:

Z = 3.4 + 5

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

An assignment statement assigns a value to the variable. Here the value 10 is assigned to spam. For the expression, it always evaluates the values and produce the results.

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

```
bacon = 22
```

```
bacon + 1
```

```
bacon = 22
```

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?

In python, a variable always starts with a character. It does not use a number in the variable name.

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

1) int() – Example: int(45.56)

2) float() – Ex : float(11.2)

3) str() – Ex: str(4567)

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

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

The expression contains the values with different data types. The issue can be fixed by

Converting 99 in string datatype: str(99).