

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
'hello'	value
-87.8	value
-	expression
/	expression
+	expression
6	value

2. What is the difference between string and variable?

Variable is the element in which we store information or values and the string is the character information that we store in the variable.

3. Describe three different data types.

Three different data types are integer, float, string

Integer – integers are whole numbers without decimal points.

Float – float is the floating-point numbers. They are the real numbers with decimal points.

String – string is a collection of one or more characters. The characters are to be placed between single or double quotes.

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

Expression is made up of both values and operators. The combination of values and operators constitutes an expression. The expression generally represents an assignment or operation. A value is assigned to a variable through an operator or an operation or calculation is done through combination of values and operators.

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

An expression always returns a value and the statement does not return a value.

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

```
bacon = 22
```

```
bacon + 1
```

The variable `bacon` contains value of 23

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

```
'spam' + 'spamspam' = 'spamspamspam'
```

```
'spam' * 3 = 'spamspamspam'
```

They both return the same output.

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

Variable names do not begin with numbers. `eggs` is valid because it comprises of only character and does not begin with a number, but `100` is a number and does not begin with a character.

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

The three functions are `int()`, `float()`, `str()`.

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

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

The expression causes error because we are trying to concatenate strings with a integer.

In order to fix the expression, we have to covert the integer to string

i.e., 'I have eaten ' + '99' + ' burritos.'