

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.

*** - mathematical operators**

'hello' - string

-87.8 - float

- - mathematical operators

/ - mathematical operators

+ - mathematical operators

6 - integer

2. What is the difference between string and variable?

String - values inside the quote assigned to a string

Variable - can store everything from strings to numbers

3. Describe three different data types.

1) Int – It stores the integers values that can be positive or negative and do not contain any decimal point.

2) Float – These are floating-point real numbers that store the decimal values. It consists of integer and fraction parts.

3) Complex – These are complex numbers specified as a real part and an imaginary part

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

An expression is a combination of operators and operands that is interpreted to produce some other value

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

An Expression always evaluates to a value. And, A statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

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

```
bacon = 22
```

```
bacon + 1
```

23

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

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

```
'spam' * 3
```

'spamspamspam'

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

eggs - can variable because it starts with character

100 - variable cannot start with a numeric value

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

The `int()` , `float()` , and `str()` functions will evaluate the integer, floating-point number, and string versions of the value passed to them.

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

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

Integer and string cannot concatenate, Convert int to str 'I have eaten ' + '99' + ' burritos.'

