

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.

*

Only those:

'hello'

-87.8

6

2. What is the difference between string and variable?

String is a kind of datatype in Python. Variable is an object, which we can create to store some information, f.e. string.

3. Describe three different data types.

Float - numerical datatype which can be used to store real numbers

Integer - numerical datatype which can be used to store only integer type values

List - sequence datatype in Python, which can be used to store both numerical and text values

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

Made of different operators. Used to produce some other values.

f.e.

$x = 10 + 15$

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

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?

Because we cannot use number as a name of the variable in Python (or begin the variable name with a number)

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

```
int(), float(), str()
```

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

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

It is causing an error because Python cannot add different datatypes.

We can convert it all to strings.

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