

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?

Solution:- String is the data type which and variable is used to store the value

3. Describe three different data types.

Solution:- Three different data types are:-

1-> Integer

2-> Float

3-> String

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

Solution:- Expression is the combination of the values , variables and the output

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

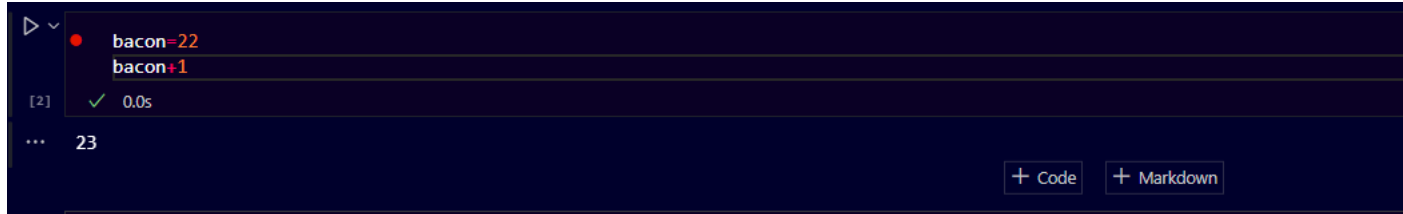
Solution:- A statement in python is used for creating variables or for displaying values

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

bacon = 22

bacon + 1

Solution:-



```
bacon=22
bacon+1
```

[2] ✓ 0.0s

... 23

+ Code + Markdown

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

'spam' + 'spamspam'



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

[4] ✓ 0.0s

... 'spamspamspam'

'spam' * 3



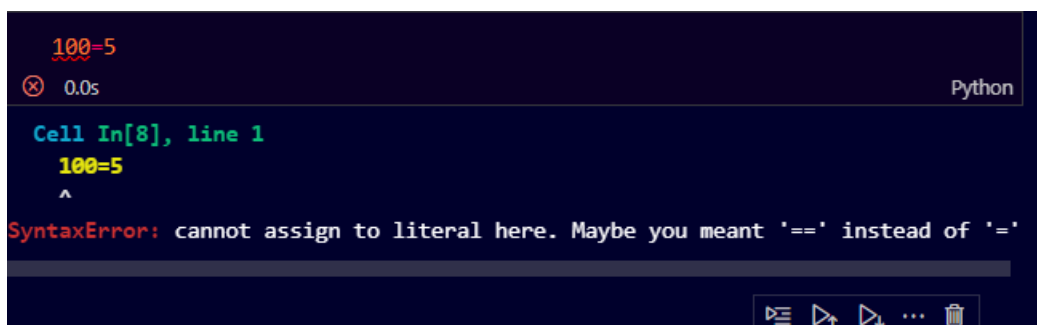
```
'spam' * 3
```

[5] ✓ 0.0s Python

... 'spamspamspam'

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

Solution:- Number cannot be the name of the variable name must start with the alphabet



```
100=5
```

⊗ 0.0s Python

Cell In[8], line 1

```
100=5
^
```

SyntaxError: cannot assign to literal here. Maybe you meant '==' instead of '='

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

Integer

```
value="10"
integer_value = int(value)
print(integer_value)
```

[11] ✓ 0.0s Python

... 10

Float

```
value = "3.14"
float_value = float(value)
print(float_value)
```

[12] ✓ 0.0s Python

... 3.14

String

```
value=42
string_value = str(value)
print(string_value)
```

[13] ✓ 0.0s Python

... 42

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

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

Solution:- Here we are concatenating the integer with the string value which is not possible

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

[16] ✗ 0.0s Python

... -----

TypeError Traceback (most recent call last)

Cell In[16], line 1

----> 1 'I have eaten' + 99 + 'burritos'

TypeError: can only concatenate str (not "int") to str

Change 99 to String and the error will solve



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

[17]



0.0s

Python

...

```
'I have eaten99burritos'
```