

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' (values)**

**-87.8 (values and expression)**

**- (expression)**

**/ (expression)**

- (expression)**

**6 (values)**

2. What is the difference between string and variable?

**A Python variable is a reserved memory location to store values while string is a particular data type of a value stored into a variable**

3. Describe three different data types.

**List, tuple, string**

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

**An expression is made up of operators and values. Always evaluates down to a single value.**

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

**An expression is made up of operators and values, and always evaluates down to a single value. On the other hand, an assignment is a Python instruction that assigns a value into a variable**

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' ('spamsppamspam')
```

```
'spam' * 3 ('spamsppamspam')
```

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

**Because a python variable name cannot start with a number and 100 is a number**

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

**We can use type casting. If the value for example is a, we can use int(a), float(a) and str(a)**

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

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

**because 99 is not string. we can use 'I have eaten ' + '99' + ' burritos.' or 'I have eaten ' + str(99) + ' burritos.'**