

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?

ANS = String are data, which is used with variable.

Variable are symbol, that can be used to store data in a programme.

3. Describe three different data types.

Ans= String = Collection of one or more character.

Numeric = numeric data type represents the data which has numeric value.

Boolean = Data Type with two built in modules (True and False).

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

ANS Expression is made of combination of operators and operands.

Expressions represents the value in Python. Eg. string

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

ANS: Statement in Python is action or command, whereas Expression is combination of variables and operation that returns value.

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

```
bacon = 22
```

```
bacon + 1
```

ANS: bacon = 23

```
In [1]: bacon = 22
        bacon + 1

Out[1]: 23
```

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

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

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

```
In [4]: 'spam' + 'spamspam'

Out[4]: 'spamspamspam'

In [5]: 'spam' * 3

Out[5]: 'spamspamspam'
```

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

ANS: Eggs is an integer name and 100 is variable. Variable can start with an integer.

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

ANS: str(), int(), float()

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

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

ANS: because 99 is an integer it cannot be concatenated with strings, if we have to concatenate it we need to do typecasting.