**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 Operator (Arithmetic Operator).

'Hello' ⇒ string

-87.8 ⇒ float

- ⇒ Mathematical Operator.

/ ⇒ Mathematical Operator.

* ⇒ Mathematical Operator.

6 ⇒ integer

**2. What is the difference between string and variable?**

String is a type of information that can be stored in a variable . Variable is a container to store different types of information.

**3. Describe three different data types.**

Three different types of data types are : Numeric type (int, float, complex), Text type (str), Boolean type (bool).

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

An expression is a combination of variables, values, operators and call to function. Expression on the right hand side of the assignment statement gets evaluated and the final value gets stored in the left hand side or variable.

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

Each line in the python script is statement (eg. spam = 10). While running this statement no value returns. While the expression on the right hand side of the assignment statement can be a single value or combination of variable, values, operators and call to function which gets evaluated to a single value and this value is stored into the left side called variable. We can call this variable in the print function to return stored value.

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

**bacon = 22**

**bacon + 1**

Bacon = 22

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

'spam' + 'spamspam' ⇒ ‘spamspamspam’

'spam' \* 3 ⇒ ‘spamspamspam’

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

Variable names always start with letters not numbers.

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

X = 20

int(X)

float(X)

str(X)

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

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

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