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

- expression

/ expression

* expression

6 - values

2. What is the difference between string and variable?

A Variable is a store of information whereas a string is a type of information that stored in variable. ie, variables are used to store values.

A string is defined by putting single quotes (‘ ’) or double quotes (“ “)

For eg: a = ”my name is hilal”

Here, ‘a’ is the variable and ”my name is hilal” is the string.

3. Describe three different data types.

Integer, float, Boolean, string, character

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

An expression is made up of operators, constants and variables.

An expression is a combination of operators and operands that is interpreted to produce some other value.

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

An Expression always evaluates to a value. And, a statement does something, like creating a variable or displaying a value, it only does whatever the statement says.

spam = 10 is a statement.

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

bacon = 22

bacon + 1 =23

variable bacon contain 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?

Because variable names cannot begin with a number.

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

Int() - integer,

float() - floating-point number,

str() - string

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

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

In the above, ‘ I have eaten’ is a string and ‘burritos’ is also a string whereas 99 is an integer. We cannot add or concatenate string and integer together.

To fix it, change integer 99 into string, like this ‘99’,

now 'I have eaten ' + '99' + ' burritos.' It gives 'I have eaten 99 burritos.' as result.