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' - String

-87.8 - Floating type

- Expression

/ Expression

* Expression

6 Integer

2. What is the difference between string and variable?

string is a data type holding characters or a group of characters together enclosed within a quote. variable are user defined values that can hold any kind of data type like string,integer,float etc.

3. Describe three different data types.

string - holding character or group of character

integer - data type for numerical values

floating point - data type for numerical decimal values.

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

expressions are mathematical operators that are used to compute values of similar data types. they can be

+ - addition

- subtraction

/ division

\* multiplication

// quotient

\*\* exponential

% remainder

> greater than

< less than

>= greater than equal to

<=less than equal to

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

A statement is action , a combination of expression and variables. spam = 10 is a statement where the integer 10 is assigned to variable spam using equal to operator/expression

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

bacon = 22 -> 22

bacon + 1 -> 23

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?

variables are defined using characters (a-z,A-Z) , underscore (\_),digits as well but should start with a character first .

eggs is a valid variable name while 100 is a digit and is therefore invalid.

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

int() for integer

float() for floating point number

str() for string

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

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

we can concat only variables of same datatype. here 99 is an integer type so to fix this either use the str() function or place 99 in between quotes.

'I have eaten ' + ‘99’ + ' burritos.'