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?

string is a datatype, variable is a kind of container to which values of different data types can be stored. for eg, a string can be stored in a variable too.

3. Describe three different data types.

int= carries integer values,

float= contains values with decimals,

string= contains character or multiple characters

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

expression= operators+operands

expression is a combination of operators and operands and produces some result upon evaluation by the interpreter.

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

expression represents a value, a statement represents a whole operation, basically an expression or multiple expressions can be a part of a statement.

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

bacon = 22

bacon + 1

a is still 22 because there is no assignment to the value of bacon itself

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 name cannot start with a number

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

int(), float(), str()

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

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

this expression causes error because there is datatype mismatch, 99 is an integer and we are trying to concatenate it with strings without converting it to string explicitly.

fix- first converting 99 to string and then joining strings -> writing it as 'I have eaten ' + ‘99’ + ' burritos.' helps