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 value which create from string of letters and should covered by ‘ ’ or “ ” and belong to str class

variable is a name assign to a part of memory that we store our data for later retrieved

3. Describe three different data types.

Int: it belongs to int class and it is negative or positive whole number without any fraction or decimal point

Float: it belongs to float class and it is real number with floating point

List: it is like an array, it is collection of data that can have different data types, list is iterable and so flexible.

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

Expression is an instruction that is combination of values, variables, operators and call to functions.

Each expression can evaluate by python and show the result.

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

Statement is an instruction which python interpreter can execute it and interpreter may or may not display result such as, if statement or assignment statement

but expression is an instruction which evaluate down to a single value and always will display a result.

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

bacon = 22

bacon + 1

It will be 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 name can not start with number, it can start only by [a-z] or \_

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

If a is our variable name

int(a) , float(a) , str(a)

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

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

Because it is mix of int and str and we only can concatenate str to str

'I have eaten ' + str (99) + ' burritos.' Now it will work.