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:** String is a data type , value in string format

**Variable:** Object where the values are stored. Eg, Values in different data type formats can be stored.

X=10

x-Variable and 10 is the value

3. Describe three different data types.

Ans: int()- contains number without decimals

Float()-Numbers with decimal points

Str()- string values within quotes . ‘123’

‘Name’

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

An expression in Python is a combination of operators and operands.

An **operand** is an object that is operated on.

Operator that performs arithmetic or logical computations .

Eg: plus, -,/,\*,power, and ,or ,not

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

Expression are different types of operators .

Statement is complete variables with expressions and values.

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

bacon = 22

bacon + 1

**Ans.** variable bacon will have value 22 only.

But answer of 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?

**Ans.** The correct way to define or initiate a variable is with characters followed by \_ followed by numbers.

100 is a value when used with = it will through error. Value cannot be assigned with value.

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

**Ans.** astype(‘int’/’float’/’str’)

Str(value)

Int(value)

Float(value)

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

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

**Ans**. String and number format cannot be added . 99 should have come in the string format to merge strings.

Correct format would be :

99 will be in quotes to merge the strings with + sign

'I have eaten ' + “99” + ' burritos.'