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.

\* (Multiplication)

'hello' (String )

-87.8 (Floating Number)

- ( Subtraction)

/ (Divison)

* (Addition)

6 (Integer)

2. What is the difference between string and variable?

Ans:- String is group of alphabets enclosed in double or single quotations marks

Example:- “hello” or ‘hello’

and variable is single alphabets need not to enclose in quotations marks for is execution operations.

3. Describe three different data types.

Ans:- Primary data, Derived and User defined

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

Ans:-The expression is made up of variable, operators and constants.

All expression perform different function such as arithmetic expression do add, subtract or multiply integers whereas other expression such as string expression give concatenation and replication function ,relational expression such as >=< and logical expression such as and , or , nor.

Example:- 50\*10+20-60 =460 ( Arithmetic expression)

“hello”+ “ineuron” = hello ineuron ( String operation)

“hello”\*3 = “hello” “hello” “hello” (String operation)

2>5 = False (Relational operation)

5>6 and 3>2 =False (Logical operation)

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

Ans:- statement is like instruction given the computer to perform an action or extract the libraries or import the keywords or use it in decision making and repeated action.

Example:- spam =10 means, we have given instruction to computer to store the value of spam as 10 in ram memory. Statement is used to express the value of variable by integer, float, string etc. While expression is result which is being interpreted by python.

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

bacon = 22

bacon + 1

Ans:- bacon= 22

bacon +1

print(bacon+1) =23

7. What should the values of the following two terms be?

Ans:- 'spam' + 'spamspam' ='spamspamspam'( it is a concatenation function)

'spam' \* 3 ='spamspamspam (it is a replication function)

8. Why is eggs a valid variable name while 100 is invalid?

Ans:- The egg is valid name because it is aliphatic whereas 100 is a in valid it is number which never use as identifiers

Example:- 1) \_ank=21

print(\_ank) =21

2) age=21

print(age) =21

hence, we cannot start variable with any number which show syntax error.

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

Ans:- Extraction of string version = str()

Extraction of float version = float()

Extraction of integer = int()

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

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

Ans:- We cannot use arithmetic operator such as addition to distinguish from each other. Addition operator mainly use to catenation operation of same variables such as number or alphabetic.

'I have eaten ' ,99 ,' burritos.' = ('I have eaten ', 99, ' burritos.')