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.

\*

'hello'

-87.8

/

-

6

Ans: Value= 'hello', -87.8, 6

String= \*, - , / , +

2. What is the difference between string and variable?

Ans: Variable stores the data. Variable can store a string, int, float, etc and string is a type of information which we store in a variable.

1. Describe three different data types.

Ans: Different data types

1. **int**

We can use int data type to represent whole numbers (integral values)

Eg: a=10

type(a) #int

1. **float**

We can use float data type to represent floating point values (decimal values)

Eg: f=1.234

type(f) float

1. **str**

str represents String data type. A String is a sequence of characters enclosed within single quotes or double quotes.

s1='Happy'

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

Ans: An expression is a combination of values, variables, operators and functions.Expressions need to be evaluated. It evaluates down to the single value

Ex: 3+3 is a expression. It is then evaluates down to single value ‘6’.

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

Ans: Expression evaluates to a single value but statement does not.

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

bacon = 22

bacon + 1

Ans: The bacon variable is equal to 22. The bacon + 1 expression does not reassign the value in bacon.

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

'spam' + 'spamspam'

'spam' \* 3

Ans: 1.‘spamspamspam’

1. ‘spamspamspam’

Both will give us the same value.

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

Ans: In Python a variable name must start with a letter or the underscore character. A variable name cannot start with a number.

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

Ans: integer= int()

Float=float()

String= str()

Above functions will evaluate to the integer, floating-point number, and string versions of the value

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

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

Ans: Python can concatenate only string to string not int. Here 99 is int value.