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

1)Ans. \*,-,/,+ are expressions and -87.8 and 6 are values

2. What is the difference between string and variable?

2) Ans. String is a array consist of Unicode characters. In phython there is no character data type as a single character also in Phython is a string with length of 1.

Variable is a name given to a memory location which consist of certain value. Also the value can be altered runtime.

3. Describe three different data types.

Ans.

Int : Integer datatype represent as int which can hold integer data type.

List : List a collection where we can store any type of data set. It’s mutable, which means that elements inside a list can be replacable

Example: L[1,24,8475475, “sudh”]

Tuple : Tuple also is a collection where we can store any type of data set, it’s immutable, which means that elements inside a tuple can’t be replaceable.

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

Ans. An expression is a combination of operators and operands, which interpreted to provide some value.

Expression is evaluated as per the type of its operators.

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

Ans. Spam=10.

It means that, in a memory we have given a name for a particular location and put some value inside the location.

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

bacon = 22

bacon + 1

Ans: After running the following code bacon contains 23

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

'spam' + 'spamspam'

'spam' \* 3

Ans. 'spam' + 'spamspam'=spamspamspam'

'spam' \* 3= ‘spamspamspam’

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

Ans. Egg is a valid name for variable as we can put any character in order to refer a memory location, however as 100 is a numeric value we can’t refer to a memory location and it’s unable to hold a value in it.

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

Ans. Int(), float() and str()

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

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

Ans. As we can’t concatenate string with integer value.

Correct statement is

‘I have eaten’+str(99)+’burritos’