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 :

‘hello’, -87.8, and 6 are Values.

, -, /, and + are expressions.

\* is not string since its not in quote. Its not Integer. Its used in Arguments and Keyword Arguments.

2. What is the difference between string and variable?

Ans :

String is value that variable can hold.

Variable is data type that store the value.

Variable can store string, integer, Boolean, or other types of value, depending upon data types. In python types of variable is determined based on the value that it store, rather than initialising at the vary start.

3. Describe three different data types.

1. Boolean : Stores yes or no value.
2. String : Stores text values
3. Float : Stores decimal value in numbers Example : 22.34
4. Integer : Stores absolute value in numbers Example : 22

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

Ans :

Expressions are made up of identifiers(Variable, direct values), Literals(Values) and Operators.

Expression are used to do the calculations (Process) and share the result of calculation(output).(Express an output of its Expression)

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

Ans:

Expression is meant to be evaluated. When the result of evaluation is stored in to variable using operator, its called Statement.

In above example, spam = 10, if code is 5+5 >>10 its evaluation and thus its an expression.

When result of evaluation, 10 is assigned to spam it becomes statement.

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

bacon = 22

bacon + 1

Ans : bacon will remain 22 only. bacon+1 is expression used for temporary calculation and result is not stored back in bacon again using statement bacon = bacon+1

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

'spam' + 'spamspam'

'spam' \* 3

Ans : 'spamspamspam’

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

Ans : Because variable 100 starts with number, which not allowed.

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

Ans:

float(3) >>3.0

str(3) >>’3’

int(3.44) >>3

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

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

Ans :

Concatenation can be done of similar data type only. Since 99 is integer, compiler does not understand how to add this with string.

99 needs to be converted to string as follows :

'I have eaten ' + str(99) + ' burritos.'

>> 'I have eaten 99 burritos.'