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.

ANSWERS:

\* (expression)

'hello' (value)

-87.8 (value)

- (expression)

/ (expression)

* (expression)

6 (value)

2. What is the difference between string and variable?

ANSWER:

VARIALE are the symbols which store any kind of information but STRINGS are the special kind of information that could be stored in variable. String is always stored in quotes.

e.g a= “my name is Shubham”

Here ‘a’ is the variable name and “my name is Shubham” is the string.

3. Describe three different data types.

ANSWER:

INTEGER – The values which are whole numbers with their valid sign convention.e.g 21, -34

FLOATING – Numbers with a decimal point are called floating numbers. e.g 21.4 ,30.7

STRING – The text values which are surrounded by single quote or double quote are considered as string. e.g “Shubham”, ‘kumar’

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

ANSWER:

A collection of operators and values is called expression. Expressions are evaluated to give single value.

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

ANSWER:

Expression contains values and operator so it could be evaluated to give single value but statement coulnot be evaluated. e.g spam=10 is only a statement where value 10 is assigned to spam variable.

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

bacon = 22

bacon + 1

ANSWER:

bacon still contain 22 because reassignment is done when it contains assignment statement e.g bacon= bacon+1

Then output bacon=23

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

ANSWER:

'spam' + 'spamspam' = ‘spamspamspam’

'spam' \* 3= ‘spamspamspam’

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

ANSWER:

The rule is variable name doesnot start with the number so 100 is invalid.

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

ANSWER:

The int( ), float( ) and str( ) are the functions which gives respective versions of a value.

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

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

ANSWER:

Since 99 is integer type value so for concatenation operation it must be converted to string value by enclosing it in quotes or using str()

For e.g

'I have eaten ' + ‘99’+ ' burritos.'