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

ANSWER::

Values:: 'hello', -87.8, 6

Expressions:: \*, - , / , +

2. What is the difference between string and variable?

ANSWER::

Variable is a container that can use to store a value in our program.

String is a sequence of characters ,so we can use to fill up a variable.

3. Describe three different data types.

ANSWER::

Datatype is nothing but a type of a data.

1.Integer: The keyword for integer datatype is int.this datatype is used or storing integer values only. In a python we don’t want to initialize a variable with their datatype its take default by value.

Ex:

a=10

print(type(a)) #output=<class int>

2.Float: The keyword for float datatype is float .This datatype is used or storing floating point values only. In a python we don’t want to initialize a variable with their datatype its take default by value.

Ex:

a=10.0

print(type(a)) #<class float>

3.String: The keyword for string datatype is str .This datatype is used or storing a sequence of characters or character which is enclosed in single quotes or double quotes or triple quotes. In a python we don’t want to initialize a variable with their datatype its take default by value.

Ex:

a='hello'

print(type(a)) #<class str>

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

ANSWER::

Expression is made up of operators and operands.

An expression is a combination of values ,variables ,operators and calls to functions, expression need to be evaluated.

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

ANSWER:

This Statements represent an action or command

Eg: print statements, assignment statements. Expression is a combination of variables, operations and values that yields a result value. An expression is something that can be reduced to a value

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

bacon = 22

bacon + 1

ANSWER::

bacon=22

because we add 1 to bacon but the value is not assigned to bacon,so the bacon is not updated.

Valid :

bacon=22

bacon=bacon+1

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

'spam' + 'spamspam'

'spam' \* 3

ANSWER::

It should be same. The above two statements are gives same output.

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

ANSWER::

100 is invalid ,Because the variable name is not started with a integer ,it doesn’t satisfies the rules of creating a variable name.

eggs is a valid variable name because it satisfies the rules of creating a variable name.

rules:

\*The variable name must not be started with a constant.

\*variable name is consists of mixture alpha numeric values .

\*variable name must not contain special symbol except underscore.

\*keywords are not used as a variable name.

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

ANSWER::

int() for getting integer

float() for getting float

str() for getting string

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

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

ANSWER::

The error is we cannot add a string value to integer value it arises the type error.

So we need to convert the integer value to string.

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