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:

A variable is used to store some value or it acts as a container that holds some value and a string is characters that are written within double or single quotes.

Example of string – “hello”, ‘world’

Example of variable – x=10, here x holds the value of 10 so, x here is declared as a variable.

3.Describe three different data types.

Answer:

The three different datatypes are Numeric, String and Boolean

Numeric datatypes are further classified into Integer and Float datatypes.

Integer- Integer datatypes are whole numbers ex: 2, 34, 4565

Float- Float datatypes are numbers in its decimal forms or fractional parts of numbers ex: 23.5, 3.4, -9.4

String- String datatypes are the characters that are enclosed in a single or double quotes ex: “hello”, ‘god’

Boolean- Boolean datatypes have only two values true and false where 0=false and 1=true.

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

Answer:

An expression is made up of operators and variables. It may contain one or more operator and one or more variables

Ex: a+b-c=25

Here a,b,c these are variables and +,-,= these are operators.

Expressions are used in mathematical calculations.

5. This assignment statements, like spam = 10. What is the difference between an

expression and a statement?

Answer:

Assignment statements are used to assign values to a variable. Here, we assign the value of 10 to the variable called spam. Whereas an expression gives some result after it has been interpreted.

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

bacon = 22

bacon + 1

Answer:

23

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

‘spam’+’spamspam’

‘spam’\*3

Answer:

‘spamspamspam’

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

Answer:

Eggs is a valid variable because it is a string and 100 is invalid because it is an integer and according to python rules an identifier cannot be an integer or a special character.

9. What three functions can be used to get the integer, floating-point number, or string

version of a value?

Answer:

Int() function can be used for integer

Float() function can be used for floating point numbers

Str() function can be used strings.

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

‘I have eaten’+ 99 +’burritos.’

Answer:

This expression causes an error because concatenation cannot be done with a string and an integer either it can should be an integer and integer or a string and a string.

Here this can be corrected by changing an integer into a string.

‘I have eaten’ + ‘99’ +’burritos’

Now it works fine

Output will be ‘I have eaten 99 burritos’.