1. What are the differences between operators and values in the following?

\*

Ans: It is a multiplication operator

'hello'

Ans: It is a string value

-87.8

Ans: It is a floating-point number

-

Ans: It is a subtraction operator

/

Ans: It is a division operator

+

Ans: It is an addition operator

6

Ans: It is an integer value

2. What is the difference between string and variable?

spam

'spam'

Answer:

A variable is storage container that stores data values in the memory with some memory address. From above it is spam

A string is a collection/sequence of characters. It is a datatype. From above it is ‘spam’

3. Describe three different data forms.

Answer:

The three data forms are as follows:

1. integer
2. float
3. string

4. What makes up an expression? What are the functions of all expressions?

Answer:

Combination of operators and operands makes up an expression. For ex: a+b=2

Here a and b are operands, + and = are operators and 2 is the resultant of the expression.

5. In this chapter, assignment statements such as spam = 10 were added. What's the difference between a declaration and an expression?

Answer:

spam = 10

Declaration is assigning. In above example, we are declaring/assigning spam with the integer value as 10.

Expression gives some results from the combination of operators and operands.

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:

1. spamspamspam
2. spamspamspam

8. Why is it that eggs is a true variable name but 100 is not?

Answer:

eggs are true variable name as it fits the variable naming convention whereas 100 can be considered as integer value and the variable

9. Which of the following three functions may be used to convert a value to an integer, a floating-point number, or a string?

Answers:

int()

float()

str()

10. What is the error caused by this expression? What would you do about it?

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

Answer:

Below is the error caused.

**TypeError**: can only concatenate str (not "int") to str

To overcome the error we will convert 99 integer value to string using str()

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