

Datatypes

Datatypes

(1) Integer - these are whole numbers

3, 10, 100, -99, -22, 178

(2) Real or Float - these are numbers with decimal points in them

3.4, 99.2, 1.05, -45.2, -37.1

(3) Character - a single symbol

'a', 'B', '£', '\$' '9'

Note that the characters are enclosed in quotation marks

(4) String - a group of characters

'hello', 'cat', '\$\$\$\$' '777'

Note that the strings are enclosed in quotation marks

(5) Boolean - can take 1 of 2 values

True or False

On or Off

1 or 0

Questions

(1) What are the datatypes of the following values:-

(a) 78

(b) 3.4

(c) 'J'

(d) 22

(e) -99

(f) 'eggs'

(g) True

(h) False

(i) 'apples'

(j) '£\$@'

(1) Integer - these are whole numbers

(2) Real or Float - these are numbers with decimal points in them

(3) Character

(4) String -a group of characters

(5) Boolean

Questions & Answers

(1) What are the datatypes of the following values:-

(a) 78 Integer (b) 3.4 Real/Float

(c) 'J' Character (d) 22 Integer

(e) -99 Integer (f) 'eggs' String

(g) True Boolean (h) False Boolean

(i) 'apples' String (j) '£\$@' String

(1) Integer - these are whole numbers

(2) Real or Float - these are numbers with decimal points in them

(3) Character

(4) String - a group of characters

(5) Boolean

Questions- Looking at Datatypes in Programs

Program 1

A = 10

B = 12

Total = A + B

print(Total)

Output

22

What is the datatypes of
the variables A and B in
Program 1?

Program 2

X = 3.4

Y = 9.2

Result = X + Y

print(Result)

Output

12.6

What is the datatypes of
the variables X and Y in
Program 2?

Program 3

J = "Hello"

print(J)

Output

Hello

What is the datatype of
the variable J in
Program 3?

Questions - Looking at Datatypes in Programs

Program 1

A = 10

B = 12

Total = A + B

print(Total)

Output

22

What is the datatypes of
the variables A and B in
Program 1?

Integer

Program 2

X = 3.4

Y = 9.2

Result = X + Y

print(Result)

Output

12.6

What is the datatypes of
the variables X and Y in
Program 2?

Real/Float

Program 3

J = "Hello"

print(J)

Output

Hello

What is the datatype of
the variable J in
Program 3?

String

Date Formats

01/12/2019 DD/MM/YYYY

12/01/2019 MM/DD/YYYY

06-JUN-18 DD-MON-YY

Date is another type of Datatype

Questions about Datatypes

A bakery stores data about pies that it makes.

Complete the table below by giving the most appropriate datatype for each bit of information.

Information	Example	Datatype
Flavour	Apple and Blueberry	
Weight (kg)	1.65	
Quantity in Stock	12	
Gluten-Free?	FALSE	

Question and Answers

A bakery stores data about pies that it makes.

Complete the table below by giving the most appropriate datatype for each bit of information.

Information	Example	Datatype
Flavour	Apple and Blueberry	String
Weight (kg)	1.65	Real/Float
Quantity in Stock	12	Integer
Gluten-Free?	FALSE	Boolean

Questions - What datatype would you assign to the following?

Datatype

Examples

(1) The nickname of your best friend

(2) The number of people at a picnic

(3) The weight of a potato in kg

(4) The number on a rolled dice

(5) An email address

Questions & Answers - What datatype would you assign to the following?

	<u>Datatype</u>	<u>Examples</u>
(1) The nickname of your best friend	String	Jai
(2) The number of people at a picnic	Integer	12
(3) The weight of a potato in kg	Real	1.5
(4) The number on a rolled dice	Integer	1,2,3,4,5,6
(5) An email address	String	