

­­­­­­Python with Data Science

**DATATYPE CONVERSION, OPERATORS, AND THE USE OF INPUT FUNCTIONS IN PYTHON**

**Datatype Conversion**

Since there can only be joining of string and string be it assigned to a variable or not and same for int and float, in a case where we have to join two or more values of different datatypes we would have to convert it first.

There are two types of Type Conversion in Python:

1. Implicit Type Conversion
2. Explicit Type Conversion

In Implicit type conversion of data types in Python, the Python interpreter automatically converts one data type to another without any user involvement while In Explicit Type Conversion in Python, the data type is manually changed by the user as per their requirement

**Note:** integer and float datatype can be converted to each other and as well to string but string datatype cannot be converted to float or integer except it is a number that is passed in that string. Read more about type conversion in python with the below link

<https://www.programiz.com/python-programming/type-conversion-and-casting>

**Operators**

Operators are special symbols that perform some operation on operands and returns the result.

Python Operators includes Arithmetic, Assignment, Comparison, Logical, Identity, Membership, Bitwise

**Arithmetic Operators**

Arithmetic operators perform the common mathematical operation on the numeric operands.

**Assignment Operators**

The assignment operators are used to assign values to variables.

**Comparison Operators**

The comparison operators compare two operands and return a boolean either True or False.

**Logical Operators**

The logical operators are used to combine two boolean expressions.

**Identity Operators**

The identity operators check whether the two objects have the same id value

**Membership Operators**

The membership test operators in and not in test whether the sequence has a given item or not.

Read more about operators with this link <https://www.tutorialsteacher.com/python/python-operators>

**Input Function**

we use the input function to prompt user for a value instead of assigning a static value

eg name = input('Please enter your name')

age = int(input('Please provide your age'))