What is Artificial Intelligence ?

* Define general intelligence
* Artificial intelligence: Any system that exhibits behavior that could be interpreted as human intelligence.

The history of AI

For loops

For loops are iterating over collection (like a list or tuple) or an iterater. The standard syntax for a loop is:

You can advance a for loop to the next iteration, skipping the remainder of the block, using the continue keyword. Consider this code, which sums up integers in a list and skips None

While loop

A while loop specifies a condition and a block of code that is to be executed until the condition evaluates to False or the loop is explicitly ended with break.

Chapter : Built-in Data Structures, Functions, and Files

Tuples:

A tuple is fixed-length, immutable sequence of Python objects. The easiest way to create one is with a comma-separated sequence of values.

You can concatenate tuples using the + operator to produce longer tuples:

Tuple methods

Since the size and contents of tuple a tuple cannot be modified, it is very light on instance methods. A particularly useful one is count, which, which counts the number of occurrences of a value:

List

In contrast with tuples, lists are variable-length and their contents can be modified in-place. You can define them using square brackets [] or using the list type function

Elements can be appended to the end of the list with the append method:

Reverse list

Reversed iterates over the elements of a sequence in reverse order:

Dictionary

Dict is likely the most important built-in Python data structure. A more common name for it is hash map or associative array.

Set

A set is an unordered collection of unique elements. You can think of them like dicts, but keys only, no values. A set can be created in two ways: via the set function or via a set literal with curly braces: