

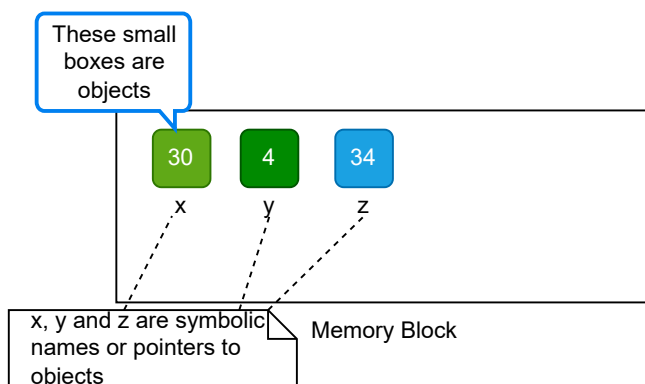
Datatype Sizes

Datatype sizes depend on the version of the python interpreter and the underlying architecture of your operating system.

Why do we need variable names?

For sure we can run all statements inside the print function like `print(1+4+5+8)` but the problem with this is that what if we need these results later?

So to use intermediate results later we store data in variables which means we give objects/memory chunks a symbolic name so that we can access their contents later easily.



Variables

A Python variable is **a symbolic name that is a reference or pointer to an object**. Once an object is assigned to a variable, you can refer to the object by that name. But the data itself is still contained within the object.

One important property of variables is that if we re-use the variable name and assign (`=`) it to a new object (data) its previous contents will be lost.

For example. `x = 4`

`x = 10`

now if we print the value of x it would be 10