**Variable:**

* Variable are named memory locations /block where the values are stored.
* We do the naming for just to identify where the value/data is stored.

**To create single variable with single values:**

**Syntax:**

**Varname = values**

* No declaration is needed, the directly initialization is done in python.
* One block in a memory will store only one data item/data element. ( either value / address)

**To create multiple variables with multiple values:**

**Syntax:**

**Var1, var2, var3….. = val1, val2, val3**

* **It is process of assigning a reference name to the data or a value which is getting stored in the memory for the further utilization of the data.**
* **The number of variables should be equal to the number of values .**
* **In not equal then we get error.**
* **One variable name n number of values it will accept but n number of variables one value is not accept.**

**Memory location for python:**

**In python memory is divided into two sections:**

**1) Variable space**

**2) Value space**

**Variable space: all the variable names are present in variable space.**

**Values space: all the values are present in value space.**

**In variable concept when we create variable whenever we assign the value is store in memory block that memory block address is assign to variable space .**

**The memory location:**

The memory in the computer is like a blocks or the memory is designed to the form of blocks.

Each block size will be fixed (based on pc)

One block is equal to the bit size of the system.

1 block = 32bit =4 bytes.

**Identifiers:**

Identifiers are the names.

That is given to identify the memory location.

All the variables are identifiers

In python all the identifiers are in term variables.

**We are following some rules for given name of the variables.**

1. Identifier should not be keyword.
2. Identifiers must start with either an alphabet or an underscore.
3. Identifier should not contains any specific special symbol other than \_(underscore).
4. Identifier must not contains space in it.(in between the word don’t give the space
5. Underscore itself accepted as identifier, because it satisfies all the above rules.)
6. Identifier should not start with numeric value.
7. Identifier should not exceed 32 characters.(PEP standards)