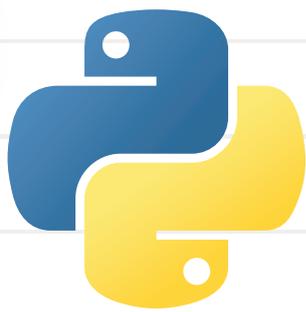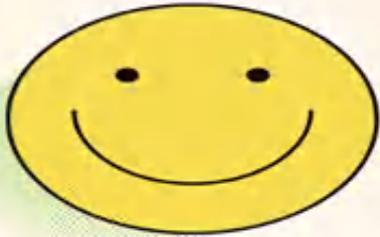# python Programming

Identifiers

What are Python Identifiers?

An identifier is a name given to entities like variables, class, functions, etc. It helps to differentiate one entity from another and understand the flow of entities in code.

Rules for Identifiers in Python

1. Combination of alphabets in lowercase (a to z) or uppercase (A to Z) or digits (0 to 9) or an underscore _
2. Digits cannot be used as the starting of an identifier.
3. Keywords cannot be used as identifiers
4. Special symbols !, @, #, $, % etc. cannot be used in an identifier
5. There is no limit on the length of an identifier

For Example __ :)

AbCd	123abc
aBcDa	123_abc
abc123	while
ABC123	1A2B
abc_123	abc@123
ABC_123	$abc

Variables in python

4   2.5   "a"   "hello"

myInt   myReal   myChar   myString
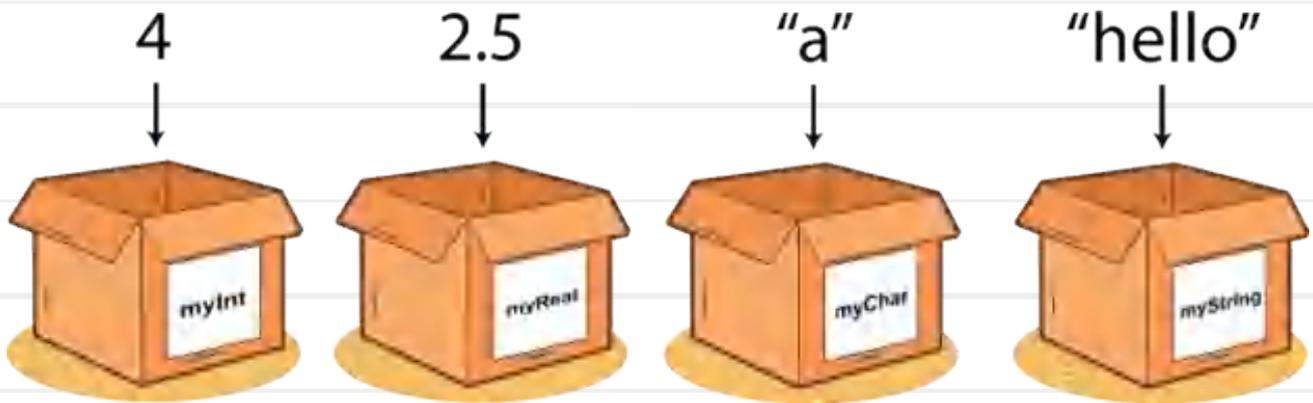
- In Python, variables need not be declared or defined in advance, as is the case in many other programming languages. To create a variable, you just assign it a value and then start using it. Assignment is done with a single equals sign (=):

For Example :-

```
>>> name = "Bob"

>>> Age = 54

>>> has_W2 = True

>>> print(name, Age, has_W2)
Output Bob 54 True
```

How to Write the names of the variables?

The most commonly used methods of constructing a multi-word variable name are the last three examples:

* **Camel Case**: Second and subsequent words are capitalized, to make word boundaries easier to see. (Presumably, it struck someone at some point that the capital letters strewn throughout the variable name vaguely resemble camel humps.)
>Example: numberOfCollegeGraduates

* **Pascal Case**: Identical to Camel Case, except the first word is also capitalized.
>Example: NumberOfCollegeGraduates

* **Snake Case**: Words are separated by underscores.
>Example: number_of_college_graduates

Let's us play with the variables....

Is Python Dynamically typed language?

Difference between Dynamically and Statically typed language

Attribute	Dynamically Typed anguage	Statically Typed language
About	If the type of the variable is checked at the runtime of the code than the language is called a dynamically typed language.	If the type of the variable is checked at the compile-time of the code than the language is called a statically typed language.
Variable deceleration	Variable without its type is initialized.	Variable with its type is initialized. Int float , string , char etc..
Languages	Python, PHP, Java-Script, etc.	Python, PHP, Java-Script, etc.