

Identifier

- A name in a Python program is called identifier.
- Or , name of an entity in a programming is called an identifier
- Or , An identifier is a name that identify an object uniquely in the entire program
- Identifiers can be variable name, function name, module name or class name.

Rules to define identifiers in Python:

1. From Character set allowed characters to write an Identifier

- English alphabet symbols(either lowercase or upper case)
- digits(0 to 9)
- Only underscore symbol(_) from special characters

Note: if we are using any other symbol like \$ then we will get syntax error.

```
cash = 10 (valid)
ca$h =20 (invalid)
```

2. Identifier should not starts with digit

```
123total (invalid)
total123 (valid)
```

3. Identifiers are case sensitive. Of course Python is a case sensitive language.

```
total=10
TOTAL=999
print(total) #10
print(TOTAL) #999
```

Note: case sensitive means - which shows difference between uppercase and lowercase letters

4. We can not use keywords as an identifier

```
if =10 (invalid)
IF =10 (valid)
```

5. There is no length limit for Python identifiers. But not recommended to use too lengthy

Note:

role of underscore (_) in identifier:

- If identifier starts with _ symbol then it indicates that it is private
- If identifier starts with __ (two underscore symbols) indicating that strongly private

- If the identifier starts and ends with two underscore symbols then the identifier is a language defined special name, which is also known as magic methods.
Example : `__init__`, `__add__`, `__main__` etc.,