



Python Introduction

Mayank Aggarwal

Today's Agenda

- Rules For Identifiers
- Python Reserved Words

Rules For Identifiers

- What is an identifier ?
 - Identifier is the name given to entities like **class**, **functions**, **variables** , **modules** and **any other object** in Python.
- Rules for identifiers:
 - Identifiers can be a combination of letters in **lowercase** (a to z) or **uppercase** (A to Z) or **digits** (0 to 9) or an **underscore** (_)
 - No special character except **underscore** is allowed in the name of a variable

Rules For Reserved Words

- **What is a Reserved Word?**
 - A word in a programming language which has a fixed meaning and cannot be redefined by the programmer or used as identifiers
- **How many reserved words are there in Python ?**
 - Python contains **33 reserved words** or **keywords**
 - The list is mentioned on the next slide
 - We can get this list by using **help()** in **Python Shell**

Rules For Reserved Words

These 33 keywords are:

*False , True , None ,def,
del ,import ,return , and , or ,
not ,if, else , elif , for , while ,
break , continue, is , as , in ,
global , nonlocal ,yield ,
try ,except , finally, raise,
lambda ,with ,assert ,class ,
from , pass*

Some Important Observations:

1. Except **False** , **True** and **None** all the other keywords are in lowercase
2. We don't have **else if** in **Python** , rather it is **elif**
3. There are no **switch** and **do-while** statements in **Python**

Rules For Identifiers

It must compulsorily begin with an underscore (_) or a letter and not with a digit . Although after the first letter we can have as many digits as we want. So **1a** is **invalid** , while **a1** or **_a** or **_1** is a **valid name** for an identifier.

```
>>> a_=10
>>> _a=10
>>> _1=10
>>> 1_=10
File "<stdin>", line 1
  1_=10
    ^
SyntaxError: invalid token
```

Rules For Identifiers

Identifiers are case sensitive , so **pi** and **Pi** are two different identifiers.

```
>>> pi=3.14
>>> print(Pi)
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'Pi' is not defined
```

Rules For Identifiers

- Keywords cannot be used as identifiers

```
>>> if=15
      File "<stdin>", line 1
        if=15
          ^
SyntaxError: invalid syntax
```

- Identifier can be of any length.

Thank you