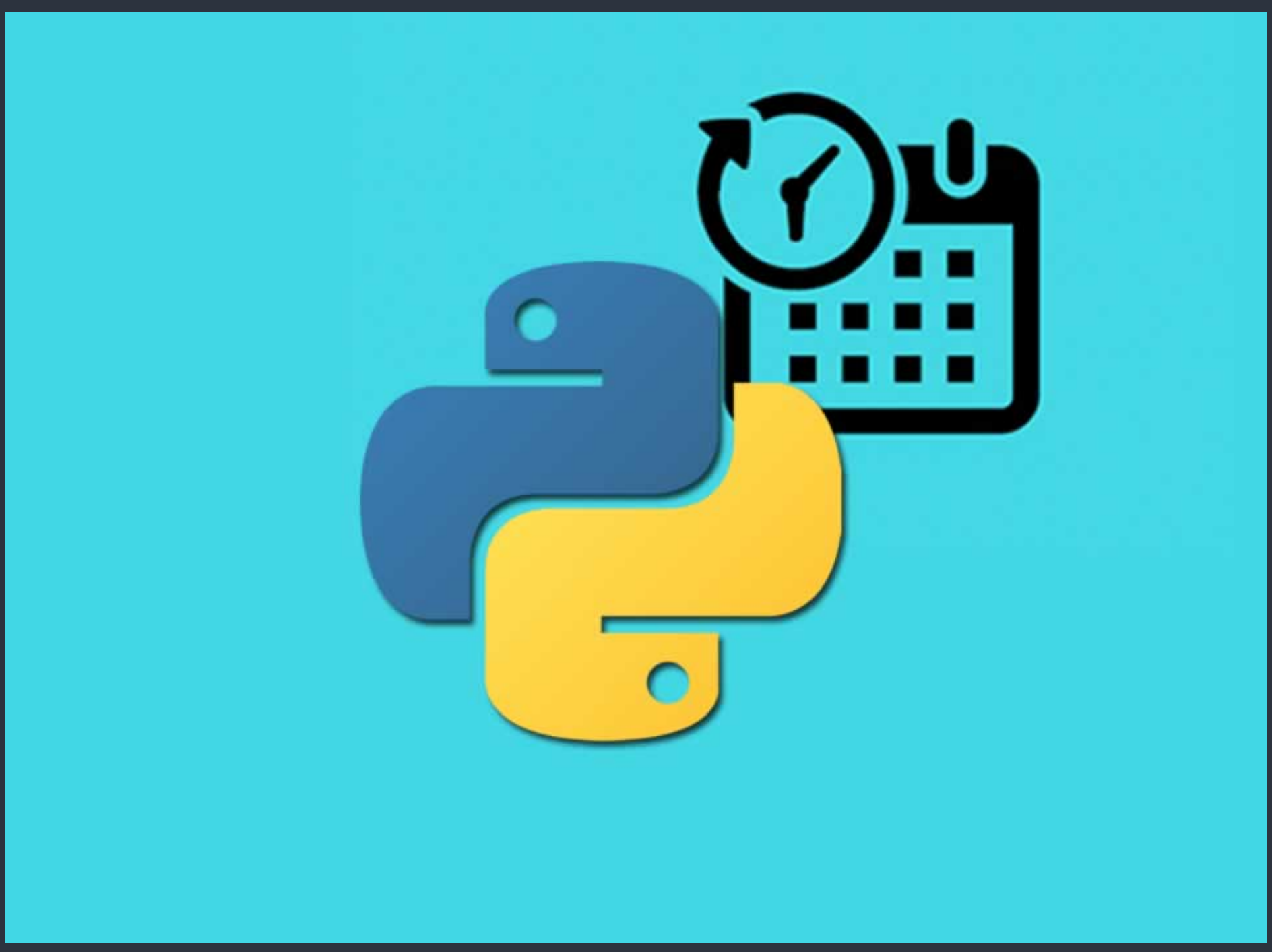
01

Python Datetime Module



Date class

The date class is used to instantiate date objects in Python.
When an object of this class is instantiated, it represents a date in the format YYYY-MM-DD.

1.today():-

This method is used to get the current date

```
from datetime import date
# getting the todays date

today = date.today()
print("\n Todays Date -",today)

############ Output ############
Todays Date - 2022-11-19
```

2.isoformat()

This method is used to convert the datetime format to string format.

```
from datetime import date
# getting the todays date

today = date.today()
Str = date.isoformat(today)
print("String Representation - ", Str)

############ Output ############
String Representation -  2022-11-19
```

3.ctime():-

Return a string representing the date

```
from datetime import date

# getting the todays date
today = date.today()
ct = date.ctime(today)
print("\n trying the ct method -",ct)


############ Output ############
trying the ct method - Sat Nov 19 00:00:00 2022
```

4.fromisocalendar()

Returns a date corresponding to the ISO calendar

```
from datetime import date
# year,week,weekday
iso_ = date.fromisocalendar(2022,2,1)
print("\n isoCalender -",iso_)

############ Output ############
isoCalender - 2022-01-10
```

5.isoweekday()

Returns the day of the week as integer where Monday is 1 and Sunday is 7

```python
from datetime import date

today = date.today()
iso_week_day = date.isoweekday(today)# date object
print("\n iso_week_day -",iso_week_day)

############ Output ############
iso_week_day - 6
```

6.replace()

Changes the value of the date object with the given parameter

```python
from datetime import date

# we use this method on the date object and
# we can change the output to any year,month,day
today = date.today()
replace_ = today.replace(year=2024)
print("\n replace -",replace_)

############ Output ############
replace - 2024-11-19
```

7.strftime()

Returns a string representation of the date with the given format

```
from datetime import date

today = date.today()
strftime_ = today.strftime("%Y/%m/%d")
print("\n strftime",strftime_)

############ Output ##############
strftime 2022/11/19
```

8.timetuple()

Returns an object of type time.struct_time

```
from datetime import date

today = date.today()
time_tuple_ = today.timetuple()
print("\n time_tuple_",time_tuple_)

########### Output ############
time_tuple_ time.struct_time(tm_year=2022, tm_mon=11,
                             tm_mday=19, tm_hour=0, tm_min=0,
                             tm_sec=0, tm_wday=5, tm_yday=323,
                             tm_isdst=-1)
```

9.toordinal()

Return the proleptic Gregorian ordinal of the date, where January 1 of year 1 has ordinal 1

```
from datetime import date

today = date.today()
to_ordinal_ = date.toordinal(today)
print("\n to_ordinal -",to_ordinal_)

############ Output ############
to_ordinal - 738478
```

10.weekday()

Returns the day of the week as integer where Monday is 0 and Sunday is 6

```
from datetime import date

today = date.today()
week_day = date.weekday(today)
print("\n week_day",week_day)

############ Output ############
week_day 5
```