

Date time module

- we can import datetime by
 - import datetime

1. formats of datetime

- 10-01-20 - %d %m %y
- 10 Jan 2020 - %d %b %Y
- 2020-01-10 - %Y-%m-%d
- 10/01/2020 - %d/%m/%Y

commands

1. `current_datetime = datetime.datetime().now()`

- `current_datetime.now()`
- `current_datetime.today()`
- `current_datetime.weekday()`
- `current_datetime.date()`
- `current_datetime.day`
- `current_datetime.year`
- `current_datetime.month`

2. Timedelta

1 A timedelta object represents a duration, the difference between two dates or times.

2

```
3 class datetime.timedelta(days=0, seconds=0, microseconds=0, milliseconds=0, minutes=0, hours=0,
  weeks=0)
4
5 All arguments are optional and default to 0. Arguments may be integers or floats, and may be
  positive or negative.
6
7 - syntax-
8     - current_day = current_date + datetime.timedelta(days,weeks,hours..=?)
9
10 ### NOTE:- in this module we can only play with days,weeks,hours=1,2,3,4,...
```

In []: 1

3. strftime()

- syntax :-

data.strftime(format)

- string from time object(time to string)
- The strftime() function is used to convert date and time objects to their string representation. It takes one or more input of formatted code and returns the string representation.

1 The table below shows all the codes that you can pass to the strftime() method.

2

3 Directive Meaning Example

4 - %a Abbreviated weekday name. Sun, Mon, ...

5

6 - %A Full weekday name. Sunday, Monday, ...

7

8 - %w Weekday as a decimal number. 0, 1, ..., 6

```
9
10 - %d    Day of the month as a zero-padded decimal.  01, 02, ..., 31
11
12 - %b    Abbreviated month name. Jan, Feb, ..., Dec
13
14 - %B    Full month name.    January, February, ...
15
16 - %m    Month as a zero-padded decimal number.  01, 02, ..., 12
17
18 - %y    Year without century as a zero-padded decimal number.  00, 01, ..., 99
19
20 - %-y   Year without century as a decimal number.  0, 1, ..., 99
21
22 - %Y    Year with century as a decimal number.  2013, 2019 etc.
23
24 - %H    Hour (24-hour clock) as a zero-padded decimal number.  00, 01, ..., 23
25
26 - %I    Hour (12-hour clock) as a zero-padded decimal number.  01, 02, ..., 12
27
28 - %p    Locale's AM or PM.  AM, PM
29
30 - %M    Minute as a zero-padded decimal number. 00, 01, ..., 59
31
32 - %S    Second as a zero-padded decimal number. 00, 01, ..., 59
33
34 - %f    Microsecond as a decimal number, zero-padded on the left.  000000 - 999999
35
36 - %z    UTC offset in the form +HHMM or -HHMM.
37
```

```
38 - %Z      Time zone name.
39
40 - %j      Day of the year as a zero-padded decimal number.    001, 002, ..., 366
41
42 - %U      Week number of the year (Sunday as the first day of the week). All days in a new year
preceding      the first Sunday are considered to be in week 0.    00, 01, ..., 53
43
44 - %W      Week number of the year (Monday as the first day of the week). All days in a new year
preceding      the first Monday are considered to be in week 0.    00, 01, ..., 53
45
46 - %c      Locale's appropriate date and time representation.  Mon Sep 30 07:06:05 2013
47
48 - %x      Locale's appropriate date representation.    09/30/13
49
50 - %X      Locale's appropriate time representation.    07:06:05
51
52 - %%      A literal '%' character.    %
```

In []: 1

4. strptime()

- string point to time(string to point objects)

- syntax -

```
- date = "20/02/2022"
- date_format = "%d/%m/%Y"

- date = datetime.datetime.strptime(date, date_format)
```

- date = 11/20/2022
- date_format = %d/%m/%Y

NOTE:- style of date and dateformat shuould be match

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