Python datetime

Python has a module named **datetime** to work with dates and times.

### Get Current Date and Time:

import datetime

datetime\_object = datetime.datetime.now()

print(datetime\_object)

OUTPUT:

2020-01-10 15:51:27.465218

# output depend on which date and time program will executed

### Get Current Date:

import datetime

date\_object = datetime.date.today()

print(date\_object)

OUTPUT:

2020-01-10 # output depend on which date and time program will executed

### Print today's year, month and day:

from datetime import date

# date object of today's date

today = date.today()

print("Current year:", today.year)

print("Current month:", today.month)

print("Current day:", today.day)

OUTPUT:

Current year: 2020

Current month: 1

Current day: 10

# output depend on which date and time program will executed

## datetime.datetime (Module)

from datetime import datetime

#datetime(year, month, day)

a = datetime(2018, 11, 28)

print(a)

# datetime(year, month, day, hour, minute, second, microsecond)

b = datetime(2017, 11, 28, 23, 55, 59, 342380)

print(b)

OUTPUT:

2018-11-28 00:00:00

2017-11-28 23:55:59.342380

### Time object to represent time:

from datetime import time

# time(hour = 0, minute = 0, second = 0)

a = time()

print("a =", a)

# time(hour, minute and second)

b = time(11, 34, 56)

print("b =", b)

# time(hour, minute and second)

c = time(hour = 11, minute = 34, second = 56)

print("c =", c)

# time(hour, minute, second, microsecond)

d = time(11, 34, 56, 234566)

print("d =", d)

OUTPUT:

a = 00:00:00

b = 11:34:56

c = 11:34:56

d = 11:34:56.234566

### Print hour, minute, second and microsecond:

from datetime import time

a = time(11, 34, 56)

print("hour =", a.hour)

print("minute =", a.minute)

print("second =", a.second)

print("microsecond =", a.microsecond)

OUTPUT:

hour = 11

minute = 34

second = 56

microsecond = 0

## Python format datetime:

from datetime import datetime

# current date and time

now = datetime.now()

t = now.strftime("%H:%M:%S")

print("time:", t)

s1 = now.strftime("%m/%d/%Y, %H:%M:%S")

# mm/dd/YY H:M:S format

print("s1:", s1)

s2 = now.strftime("%d/%m/%Y, %H:%M:%S")

# dd/mm/YY H:M:S format

print("s2:", s2)

OUTPUT:

time: 16:05:46

s1: 01/10/2020, 16:05:46

s2: 10/01/2020, 16:05:46

# output depend on which date and time program will executed

### strptime():

from datetime import datetime

date\_string = "21 June, 2018"

print("date\_string =", date\_string)

date\_object = datetime.strptime(date\_string, "%d %B, %Y")

print("date\_object =", date\_object)

OUTPUT:

date\_string = 21 June, 2018

date\_object = 2018-06-21 00:00:00