datetime

```
1 | import time
2
   from datetime import timedelta, date, time as t, datetime
3
   # -----timedelta
5
   y = timedelta(days=3)
   print(f"{y=}, {type(y)=}")
6
7
   # y=datetime.timedelta(days=3), type(y)=<class 'datetime.timedelta'>
8
   print(y)
9
   # 3 days, 0:00:00
10
11 | # -----date
12
   # 日期对象
   d1 = date.fromtimestamp(time.time())
13
14 print(f"{d1=}, {type(d1)=}")
   # d1=datetime.date(2022, 3, 12), type(d1)=<class 'datetime.date'>
16 \mid d = y + d1
   print(f"{d=}, {type(d)=}")
17
18 | d2 = date.today()
19 print(f"{d2=}, {type(d2)=}")
20
   # print(f"{d2.year=}, {type(d2.year)=}"
21 #
           f"{d2.month=}, {type(d2.month)=}"
           f"{d2.day=}, {type(d2.day)=}")
22
23 | # d1=datetime.date(2022, 3, 12), type(d1)=<class 'datetime.date'>
d3 = date.fromisoformat("2022-04-12")
   print(f"{d3=}, {type(d3)=}")
26 | # d3=datetime.date(2022, 4, 12), type(d3)=<class 'datetime.date'>
27
   print(f"{date.min=}, {type(date.min)=}")
   d7 = date(2022, 5, 16).timetuple()
28
29 print(f"{d7=}, {type(d7)=}")
   # d7=time.struct_time(tm_year=2022, tm_mon=5, tm_mday=16, tm_hour=0,
   tm_min=0, tm_sec=0, tm_wday=0, tm_yday=136, tm_isdst=-1), type(d7)=<class
    'time.struct_time'>
31
   d8 = date(2022, 5, 16).replace(2025)
   print(f"{d8=}, {type(d8)=}")
32
33
   # d8=datetime.date(2025, 5, 16), type(d8)=<class 'datetime.date'>
34
35 # 日期字符串
36 | d4 = date(2022, 5, 16).ctime()
37
   print(f"{d4=}, {type(d4)=}")
38
   # d4='Mon May 16 00:00:00 2022', type(d4)=<class 'str'>
   d5 = date(2022, 5, 16).strftime("%Y,%m,%d")
39
   print(f"{d5=}, {type(d5)=}")
40
41
   # d5='2022,05,16', type(d5)=<class 'str'>
   d6 = date(2022, 5, 16).isoformat()
42
43
   print(f"{d6=}, {type(d6)=}")
44
   # d6='2022-05-16', type(d6)=<class 'str'>
45
46
   # -----datetime
   # 日期时间对象
47
48 dt1 = datetime.today()
49 | print(f"{dt1=}, {type(dt1)=}")
```

```
50 | # dt1=datetime.datetime(2022, 3, 13, 9, 30, 22, 113951), type(dt1)=<class
    'datetime.datetime'>
51
   dt2 = datetime.now()
52 print(f"{dt2=}, {type(dt2)=}")
   # dt2=datetime.datetime(2022, 3, 13, 9, 30, 22, 113951), type(dt1)=<class
    'datetime.datetime'>
54 dt3 = datetime.fromtimestamp(time.time())
    print(f"{dt3=}, {type(dt3)=}")
55
56 | # dt3=datetime.datetime(2022, 3, 13, 9, 34, 37, 333077), type(dt3)=<class
    'datetime.datetime'>
57 dt4 = datetime.utcfromtimestamp(time.time())
58
    print(f"{dt4=}, {type(dt4)=}")
   # dt4=datetime.datetime(2022, 3, 13, 1, 35, 36, 318019), type(dt4)=<class
    'datetime.datetime'>
60 dt5 = datetime.strptime("2023/02/10", "%Y/%m/%d")
    print(f"{dt5=}, {type(dt5)=}")
61
    # dt5=datetime.datetime(2023, 2, 10, 0, 0), type(dt5)=<class
62
    'datetime.datetime'>
63
64 # 日期时间字符串
65 dt6 = dt1.strftime("%Y/%m/%d %H:%M:%S")
    print(f"{dt6=}, {type(dt6)=}")
66
67
   # dt6='2022/03/13 09:43:31', type(dt6)=<class 'str'>
68 dt7 = dt1.strftime("%Y/%m/%d")
69
   print(f"{dt7=}, {type(dt7)=}")
70 # dt7='2022/03/13', type(dt7)=<class 'str'>
71
```