PYTHON - DATETIME

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Get Current Date and Time

```
#datetime work with dates and times
import datetime

datetime_object = datetime.datetime.now()
print(datetime_object)

date_object = datetime.date.today()
print(date_object)
```

Date object to represent a date

```
d = datetime.date(2019, 4, 13)
print(d)

# date object of today's date
today = datetime.date.today()

print("Current year:", today.year)
print("Current month:", today.month)
print("Current day:", today.day)
```

Time object to represent time

```
from datetime import time
# time(hour = 0, minute = 0, second = 0)
a = time()
print("a =", a)

b = time(11, 34, 56)
print("b =", b)

# time(hour, minute, second, microsecond)
c = time(11, 34, 56, 234566)
print(“c =", c)
```

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)
```

Python datetime object

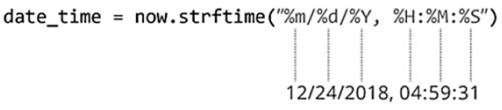
```
from datetime import datetime

#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)
```

Difference between two dates and times

```
from datetime import datetime, date

t1 = date(year = 2018, month = 7, day = 12)
t2 = date(year = 2017, month = 12, day = 23)
t3 = t1 - t2
print("t3 =", t3)

t4 = datetime(year = 2018, month = 7, day =
12, hour = 7, minute = 9, second = 33)
t5 = datetime(year = 2019, month = 6, day =
10, hour = 5, minute = 55, second = 13)
t6 = t4 - t5
print("t6 =", t6)
```

Format date using strftime()

converts a datetime object containing current date and time to different string formats.




```
from datetime import datetime
now = datetime.now() # current date and
time

year = now.strftime("%Y")
print("year:", year)
month = now.strftime("%m")
print("month:", month)
day = now.strftime("%d")
print("day:", day)

time = now.strftime("%H:%M:%S")
print("time:", time)
```

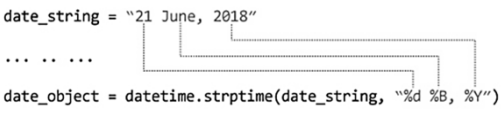
Format date using strftime()

The way date and time is represented may be different in different places, organizations etc. It's more common to use mm/dd/yyyy in the US, whereas dd/mm/yyyy is more common in the UK.

```
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)
```

strptime()

The strptime() method creates a datetime object from a given string (representing date and time).




```
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)
# %B - Month's name in full.
# Example: January, February etc.
```

THANK YOU