# How to compare two dates with python

## Use of datetime

#### Get the current date

```
import datetime
d = datetime.date(2022, 11, 13)
print(d)
```

### **Output**

2022-11-13

import datetime

#### Get the current date

```
datetime_today = datetime.datetime.now()
print(datetime_today)
```

2022-11-16 00:39:50.679648

#### Or

```
datetime_today = datetime.datetime.today()
print(datetime_today)
```

## How to see the possibilities of datetime

```
import datetime
print(dir(datetime))

['MAXYEAR', 'MINYEAR', '__builtins__', '__cached__', '__doc__', '__file__',
'__loader__', '__name__', '__package__', '__spec__', 'date', 'datetime',
'datetime_CAPI', 'sys', 'time', 'timedelta', 'timezone', 'tzinfo']
```

### Obtain a date from a starting date:

```
Here the starting date is 1-1-1970

from datetime import date

timestamp = date.fromtimestamp(1529244900)
print("Date =", timestamp)

Output
Date = 2018-06-17
```

### Obtain the year, month and day of today

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

### **Output**

year: 2022 month: 11 day: 16

#### Make a list of dates

```
import datetime
start = datetime.date(2022,8,12)
# Number of days
k = 5
res = []
for day in range(k):
    date = (start + datetime.timedelta(days = day)).isoformat()
    res.append(date)
# result (type-> list)
print(res)
```

#### Output

['2022-08-12', '2022-08-13', '2022-08-14', '2022-08-15', '2022-08-16']

### **Export some days from the list above**

For example we need to export the dates of 13, 14 and 15 of August

```
from datetime import datetime
# datetime(year, month, day, hour, minute, second, microsecond)
a = datetime(2022, 8, 13, 0, 0, 0, 0) # type: datetime.datetime 13/8/2022
print("year =", a.year)
print("month =", a.month)
print("month =", a.day)
print("hour =", a.hour)
print("minute =", a.minute)
print("timestamp =", a.timestamp())
b=datetime(2022, 8, 15, 0, 0, 0, 0). # type -> datetime.datetime 15/8/2022
import datetime
e=∏
for i in range(len(res)):
  d = datetime.datetime.strptime(str(res[i]), '%Y-%m-%d')
  if d.timestamp() \geq a.timestamp() and d.timestamp() \leq b.timestamp():
     e.append(res[i])
print(e) # type -> list
Output
['2022-08-13', '2022-08-14', '2022-08-15']
```