In [3]:

```
#


def printLeapsInRange(start,end):
    for start in range(start,end+1):
        if(checkLeap(start)):
            print(start)
    return
def checkLeap(number):
    if(number%400==0 or (number%100!=0 and number%4==0)):
        return number

printLeapsInRange(2000,2020)
```

```
2000
2004
2008
2012
2016
2020
```

In [132]:

```
# Calculate no of days in a given time period using leapyear

def noofDays(start,end):
    sum = 0
    for start in range(start,end+1):
        if(checkLeap(start)):
            sum += 366
        else:
            sum += 365
    return sum
noofDays(2012,2020)
```

Out[132]:

```
3288
```

In [125]:

```
# Checking the no of days in a month

def checkMnth(month,year):
    res = 0

    if((month <=7 and month %2 !=0 and month!=2) or (month>=8 and month %2 == 0)):
        res=31
    elif((month <=7 and month %2 ==0 and month!=2)or(month>=8 and month %2 !=0)):
        res =30
    else:
        if(checkLeap(year) and month == 2):
            res = 29
            print(res)
        else:
            res = 28

    return res
```

```
29
```

Out[125]:

```
29
```

In [116]:

```

def noofDaysBetweenMonthsOfYear(month1,year1,month2,year2):
    sumD=0
    if(year1 == year2):
        for year1 in range(year1,year2+1):
            for month1 in range (month1,month2+1):
                sumD += checkMnth(month1,year1)

    return sumD

```

```
59
```

Out[116]:

```
1416
```

In [139]:

```
def noofDays(m1,y1,m2,y2):
    total = 0
    if((y1+1) == y2 or (y2-1) == y1):
        total += noofDaysBetweenMonthsOfYear(m1,y1,12,y1)
        total += noofDaysBetweenMonthsOfYear(1,y2,m2,y2)
    elif(y1 == y2):
        total += noofDaysBetweenMonthsOfYear(m1,y1,m2,y2)
    else:
        total += noofDaysBetweenMonthsOfYear(m1,y1,12,y1)
        total += noofDaysBetweenMonthsOfYear(1,y2,m2,y2)
        i = y1+1
        j = y2-1
        for i in range(i,j+1):
            if(checkLeap(i)):
                total += 366
            else:
                total += 365
    return total
noofDays(11,1975,3,1999)*24
```

Out[139]:

```
205248
```

In [ ]: