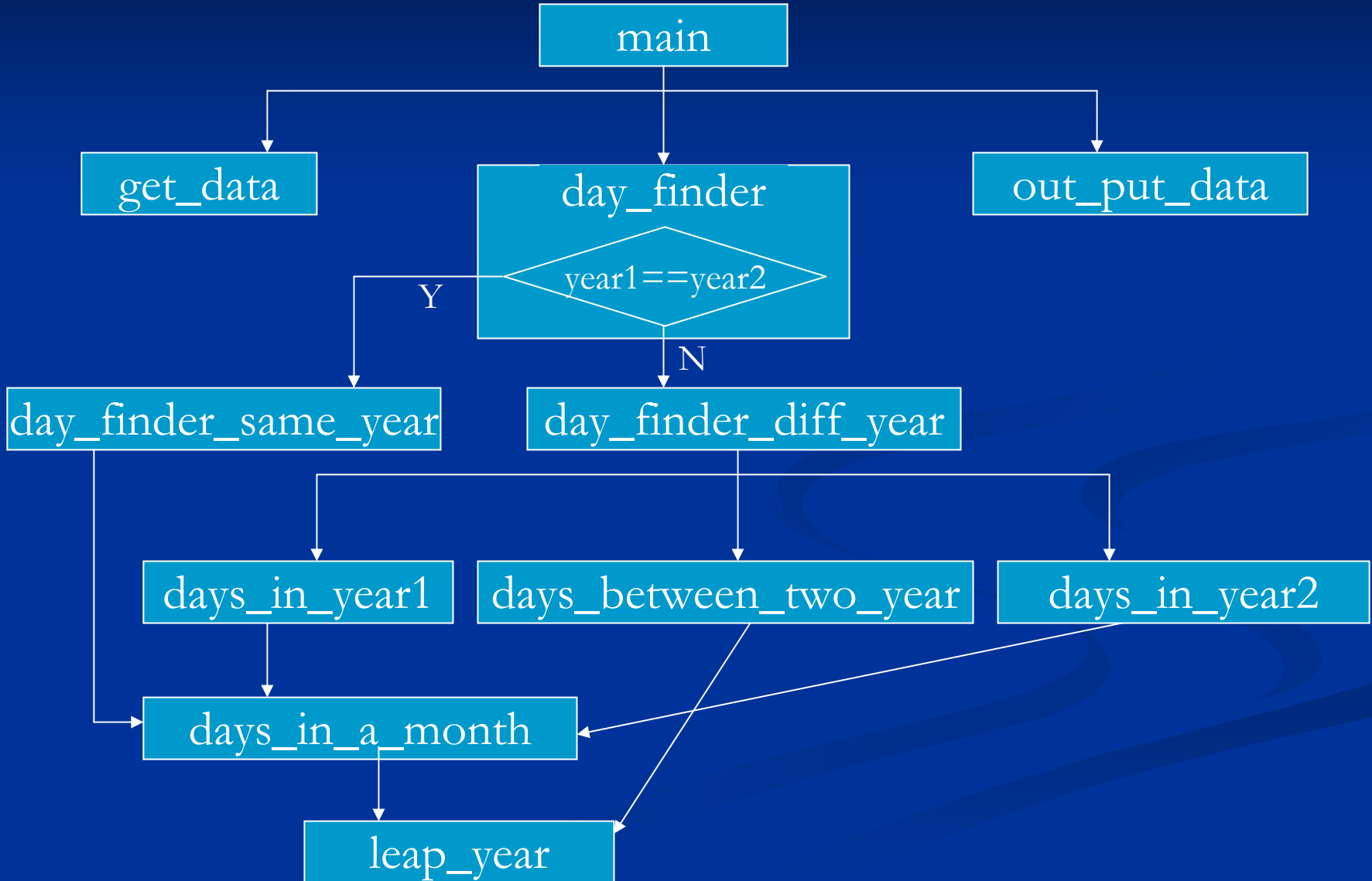


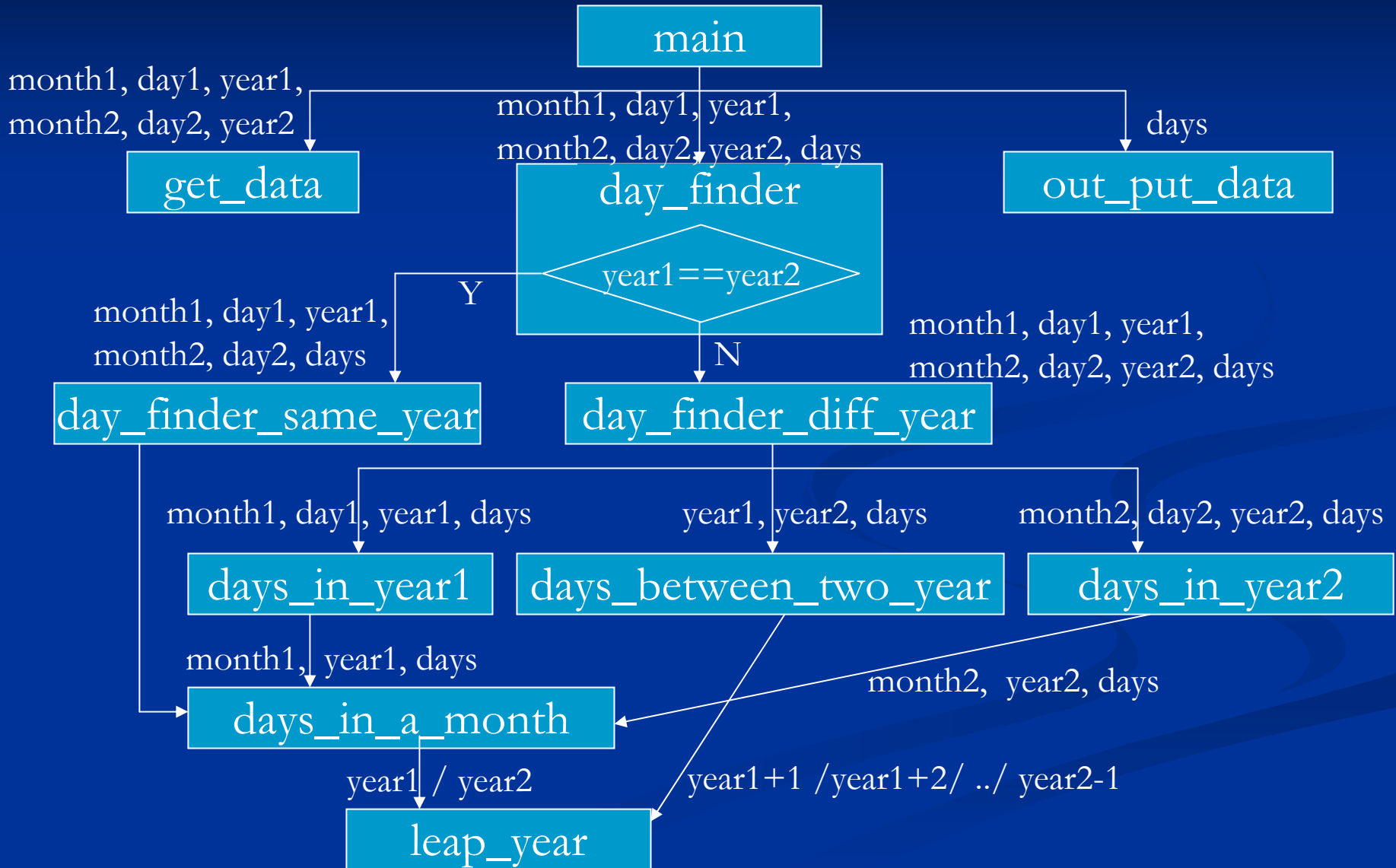
# Homework 5

Computing days between two dates

# Top Down Design



# Top Down Design (with data flow)

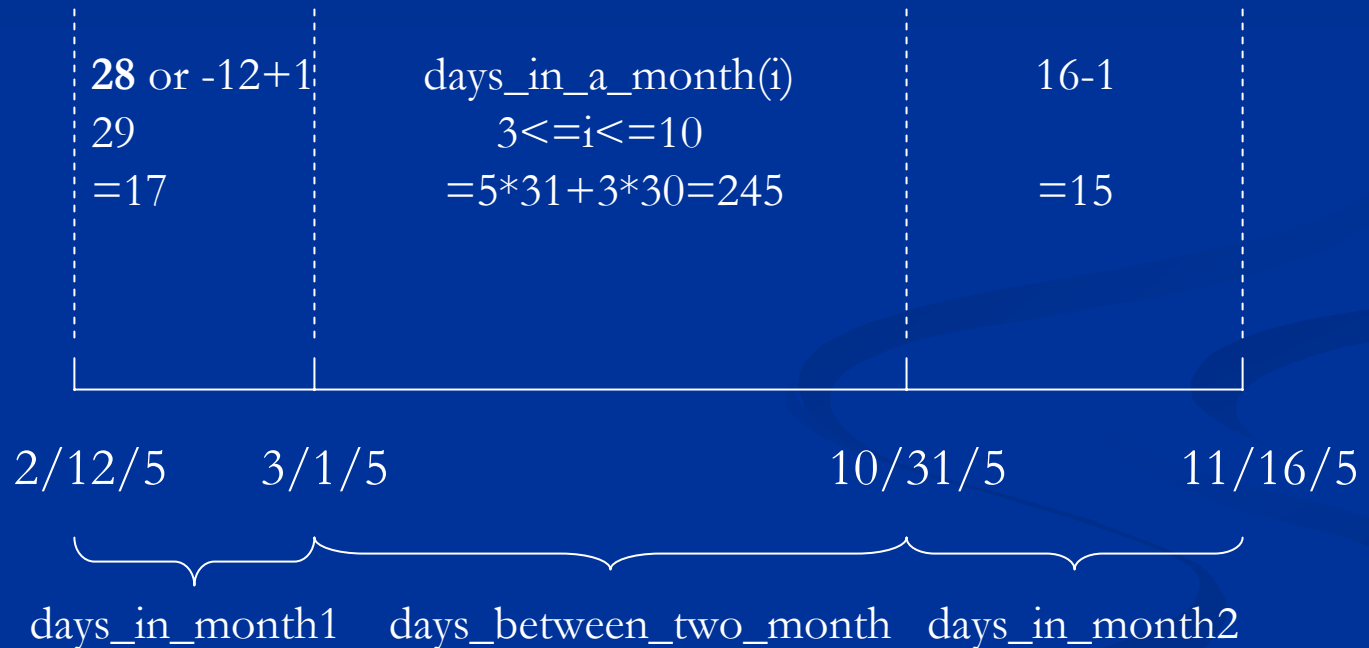


# Example1 (year1 == year2)

Enter (including) first date: 2/12/5

Enter (not including) second date: 11/16/5

There are 277 days between the two dates



$$\text{Total days} = 17 + 245 + 15 = 277$$

Question: how about if (month1 == month2)?

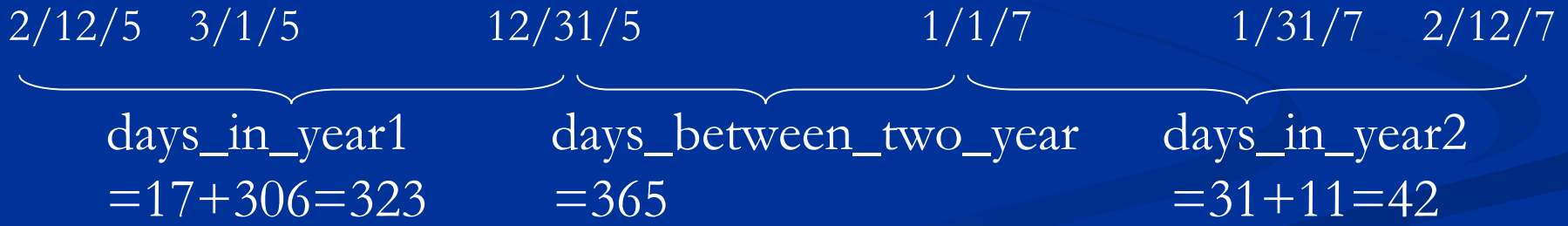
# Example2 (year1 != year2)

Enter (including) first date: 2/12/5

Enter (not including) second date: 2/12/7

There are 730 days between the two dates

|                   |                                |               |                           |      |
|-------------------|--------------------------------|---------------|---------------------------|------|
| 28 or -12+1<br>29 | days_in_a_month(i)<br>3<=i<=12 | 365 or<br>366 | days_in_a_month(i)<br>i=1 | 12-1 |
| =17               | =6*31+4*30=306                 | = 365         | = 31                      | =11  |



Total days = 323 + 365 + 43 = 730