Problem 9 : Exact age in days, months and years from DOB

Understood : Ask date of Birth and current date asking for day /month /year and ~~unistiti/it~~ give age in exact days, months and years.

Solution : Validates the given input then check for difference in years, months and days. If days are negative we borrow days from previous month. If month is negative we borrow month from previous year.

Pseudocode :

```
function   Days In Month (month, year)

     If   month == 1  OR   month == 3   OR   month == 5   OR month == 7
     OR  month == 8   OR  month == 10   OR month == 12 THEN

          return  31

     ELSE  IF month == 4   OR month == 6   OR month == 9   OR
     month == 11  THEN

          return 30

     ELSE IF   month == 2   AND ( year % 400  OR ( year % 4 AND year % 100
                                          = 0               = 0            != 0 )

          return  29

     ELSE

          return 28
```

```
INPUT    DOB  ( day, month, year )
INPUT    TodayDate ( day, month, year )
IF DOB. month < 1    OR    DOB. month > 12
    OUTPUT "  Invalid month Entered "
ELSE IF    DOB.day ≠ 1   OR    DOB.day > DaysInmonth ( DOB. month , DOB. year )
        OR   TodayDate. day ≠ < 1   OR   TodayDate. day > DaysInmonth ( month, year
        OUTPUT " invalid day Entered "
ELSE IF    DOB.year > TodayDate.year  OR  ( DOB.year == TodayDate.year
        AND   DOB.month > TodayDate.month )
        OUTPUT    " invalid date, DOB cannot be after today's day "

END IF
years =  TodayDate. year   -  DOB. year
months =  TodayDate. month  - DOB. month
days  =  TodayDate. day   -  DOB. day

IF days < 0    THEN
    months = months - 1
    days = days + DaysInMonth ( TodayDate.month - 1 , TodayDate. year )
ELSE  IF   months < 0   THEN
    years = years - 1
    month = months + 12
    OUTPUT   " Exact age is ", years, " years ", month " months and " days
        " days is the age "
END IF
END
```
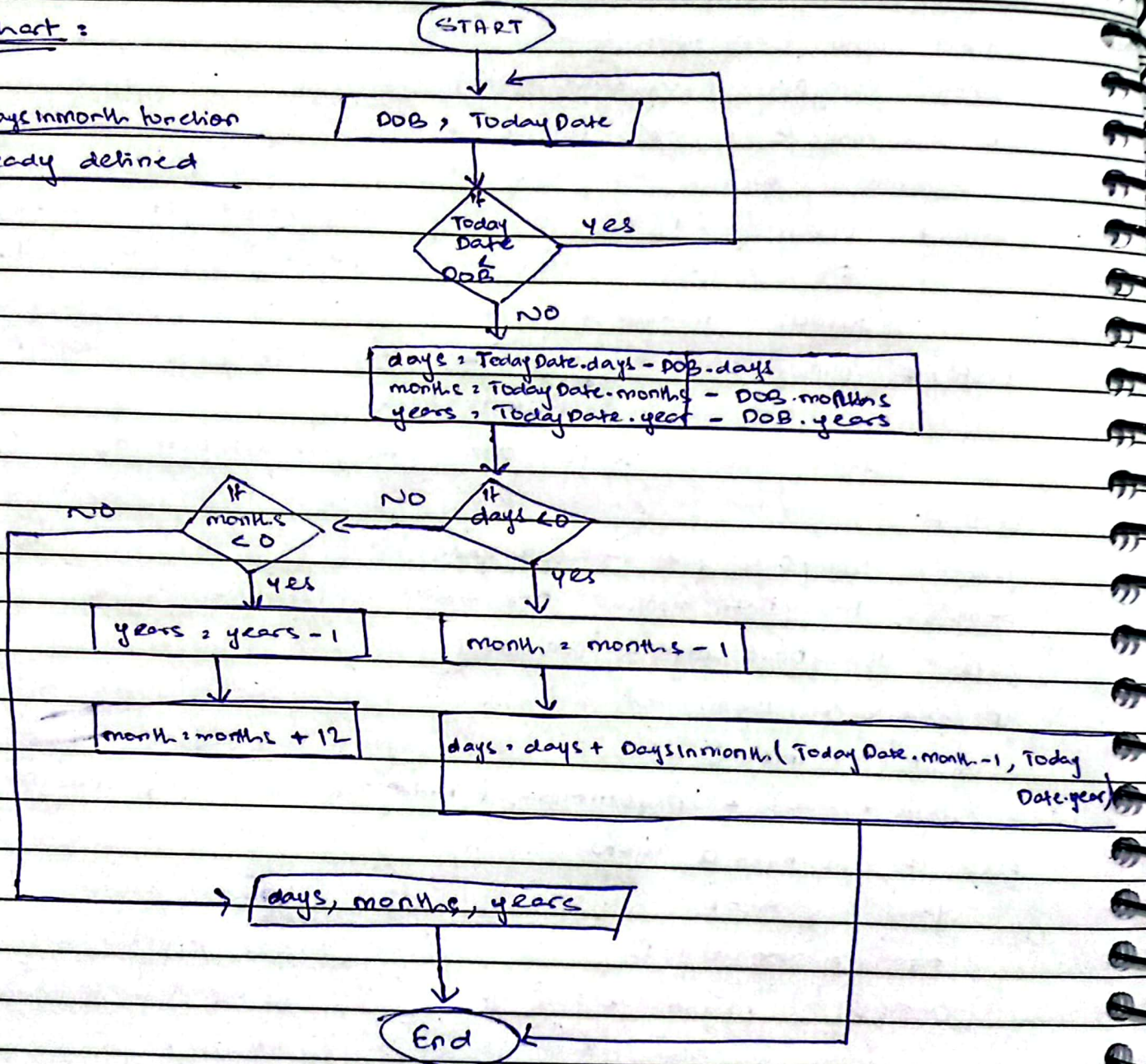
Flowchart :

START

DOB , Today Date

If Today Date < DOB → yes

NO

days = Today Date.days - DOB.days
months = Today Date.months - DOB.months
years = Today Date.year - DOB.years

If months < 0 ← NO ← If days < 0

NO (months)   yes

yes (days)

years = years - 1

month = months - 1

month = months + 12

days = days + DaysInmonth (Today Date.month -1, Today Date.year)

days, months, years

End

IPO chart :

Input	Process	Output
- Input the Date of Birth of a person - Input the current date in format (day, Month, year)	- check if the DOB is less than current date. - check if all days months and year of DOB are before today date. - calculate difference in days, months and years. - for negative days borrow days from previous month. - for negative months borrow from previous year.	- Invalid Input if days, month or year is incorrect after validation - Output the exact age in days, months and years.