12 - (3 - 9)

Date:

Problem 9 : DOB Calculator

* IPO:

Input:

- current year, birth year, current month, birth month, current date, birth date

Processing:

- IF currentyear <= 2024 AND birthyear >= 1924 THEN

  Years = currentyear - birthyear

  ELSE

  PRINT " Invalid Year"

- IF (current date < 0 AND current date >=31) AND (birthdate < 0 AND birthdate >=31) THEN

  IF (birthmonth == 1) OR (birthmonth == 3) OR (birthmonth == 5) OR (birthmonth == 7) OR (birthmonth == 9) OR (birthmonth == 11) THEN

  IF birthmonth > currentmonth THEN

  Days = birthdate - currentdate

  ELSEIF birthmonth == currentmonth THEN

  Days = 0

  ELSE

  Days = 31 - (currentdate - birthdate).

  ENDIF

  ELSEIF (birthmonth == 4) AND (birthmonth == 6) AND (birthmonth == 8) AND (birthmonth == 10) AND (birthmonth == 12) THEN.

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```
IF birthmonth > currentmonth THEN
    Days = birthdate - currentdate
ELSEIF birthmonth == currentmonth THEN
    Days = 0
ELSE
    Days = 30 - (currentdate - birthdate)
ENDIF
ELSEIF birthmonth == 2 THEN
    IF birthmonth > currentmonth THEN
        Days = birthmonth - currentmonth
    ELSEIF birthmonth == currentmonth THEN
        Days = 0
    ELSE
        Days = 28 - (currentdate - birthdate)
ELSE
    PRINT " Error "
```

- IF (currentmonth < 0 AND currentmonth > 13) AND (birthmonth < 0 AND birthmonth > 13) THEN

```
    IF birthmonth > currentmonth THEN
        Month = birthmonth - currentmonth
    ELSEIF birthmonth == currentmonth THEN
        Month = 0
    ELSE
        Month = 12 - (currentmonth - birthmonth)
ELSE
    PRINT" Error"
```

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Output :

- age in years, months and days.

*** Pseudocode:**

```
DECLARE birth_date, birth_month, birth_year, current_date, current_month,
current_year : INTEGER.

INPUT birth_date, birth_month, birth_year, current_date, current_month,
current_year

IF (current_year >= 2024) AND (birth_year <= 1900) THEN
    Years = current_year - birth_year
ELSEIF (birth_year MOD 4 == 0) THEN
    Years = (current_year - birth_year) MOD 4
ELSE
    PRINT " Invalid Year"
ENDIF
IF (current_month >0 AND current_month < 13) AND
(birth_month >0 AND birth_month < 13) THEN
    IF birth_month > current_month THEN
        Months = birth_month - current_month
    ELSEIF birth_month == current_month THEN
        Months = 0
    ELSEIF birth_month < current_month THEN
        Months = 12 - (current_month - birth_month)
    ELSE
        PRINT "Error"
ENDIF
```

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```
IF (birth_date > 0 AND birth_date < 32) AND (current_date > 0 AND
current_date < 32) THEN
    IF (birth_month == 1) OR (birth_month == 3) OR
    (birth_month == 5) OR (birth_month == 7) OR (birth_month == 9)
    OR (birth_month == 11) THEN
        IF birth_date > current_date THEN
            Days = birth_date - current_date
        ELSEIF birth_date == current_date THEN
            Days = 0
        ELSEIF birthdate < current_date THEN
            Days = 31 - (current_date - birth_date).
        ELSE
            PRINT " Error".
    ELSEIF (birth_month == 4) OR (birth_month == 6) OR
    (birth_month == 8) OR (birth_month == 10) OR
    (birth_month == 12) THEN
        IF birth_date > current_date THEN
            Days = birth_date - current_date
        ELSEIF birth_date == current_date THEN
            Days = 0
        ELSEIF birth_date < current_date THEN
            Days = 30 - (current_date - birth_date)
        ELSE
            PRINT "Error"
```

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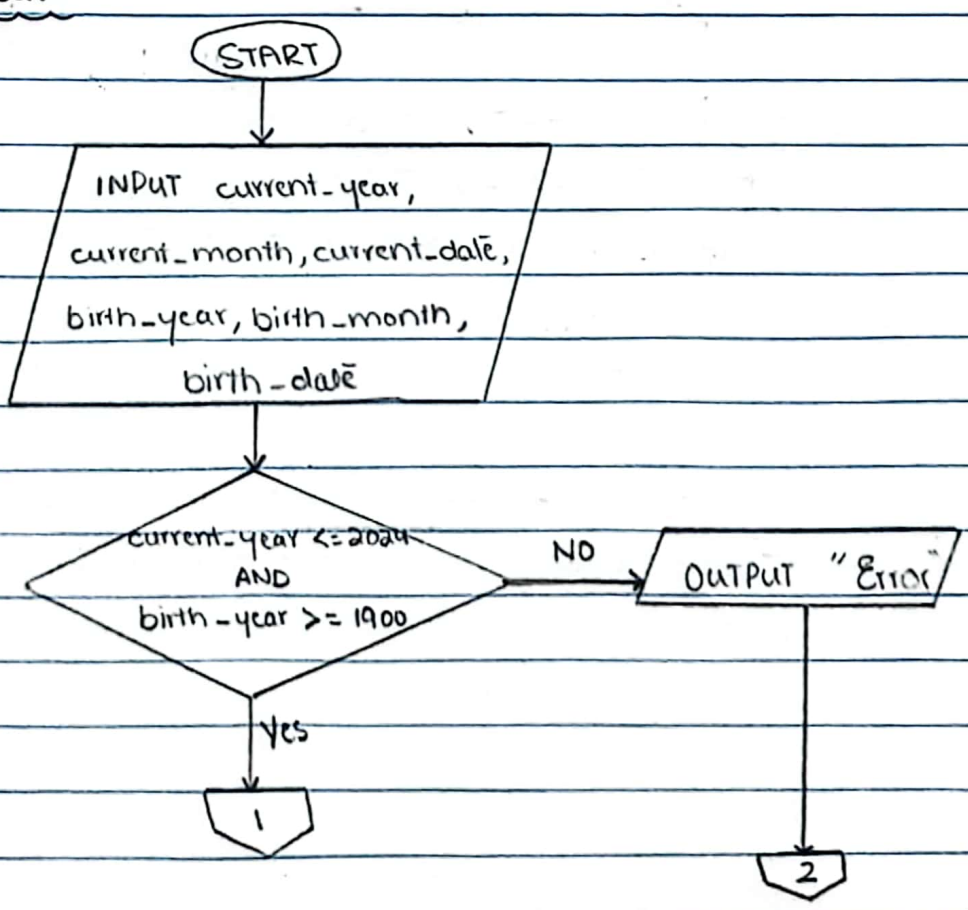
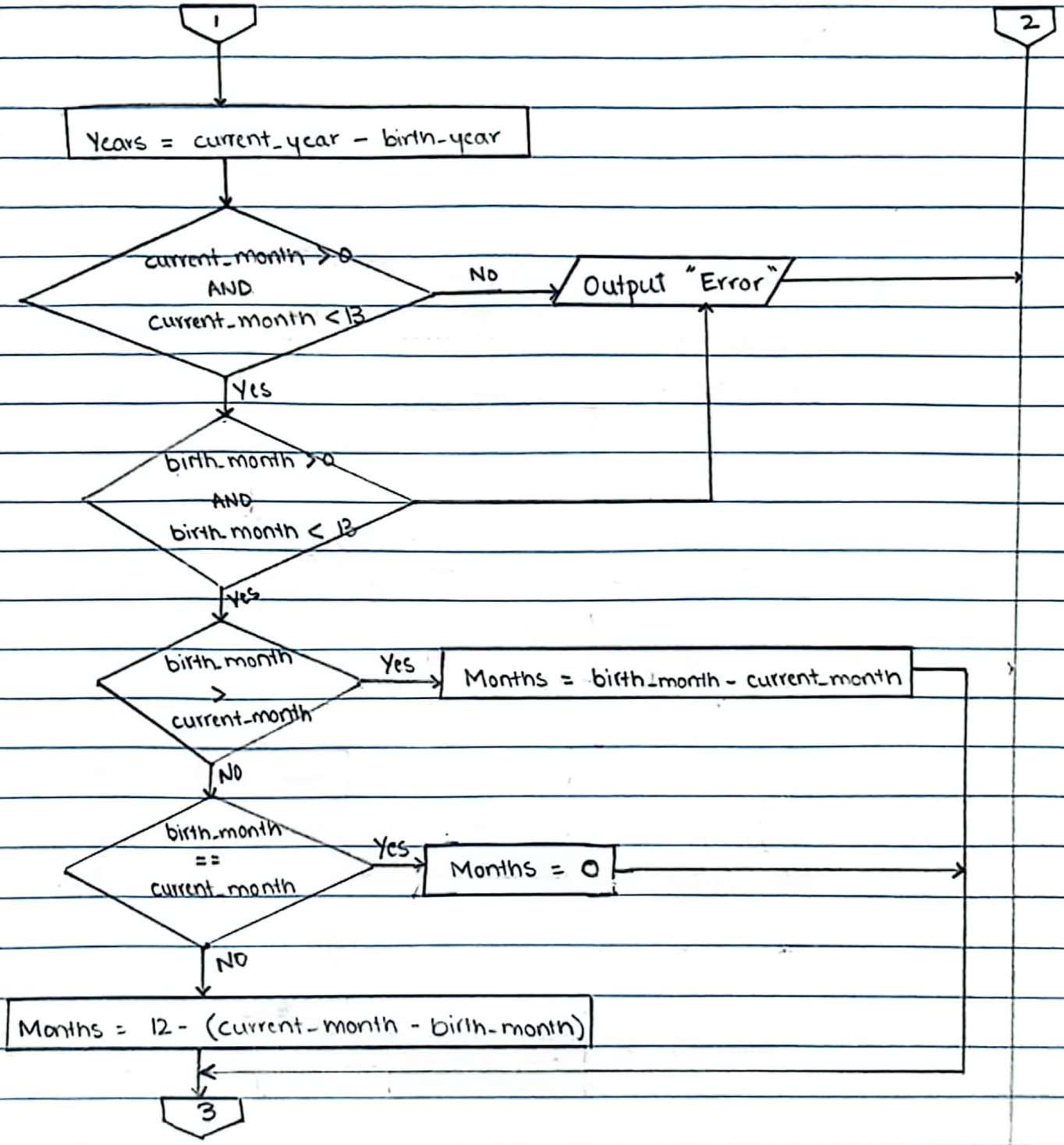
```
ELSEIF (birth_month == 2) THEN
    IF birth_date > current_date THEN
        Days = birth_date - current_date
    ELSEIF birth_date == current_date THEN
        Days = 0
    ELSEIF birth_date < current_date THEN
        Days = 28 - (current_date - birth_date)
    ELSE
        PRINT " Error ".
ELSE
    Print "Error".
```

PRINT (Years, Months, Days)

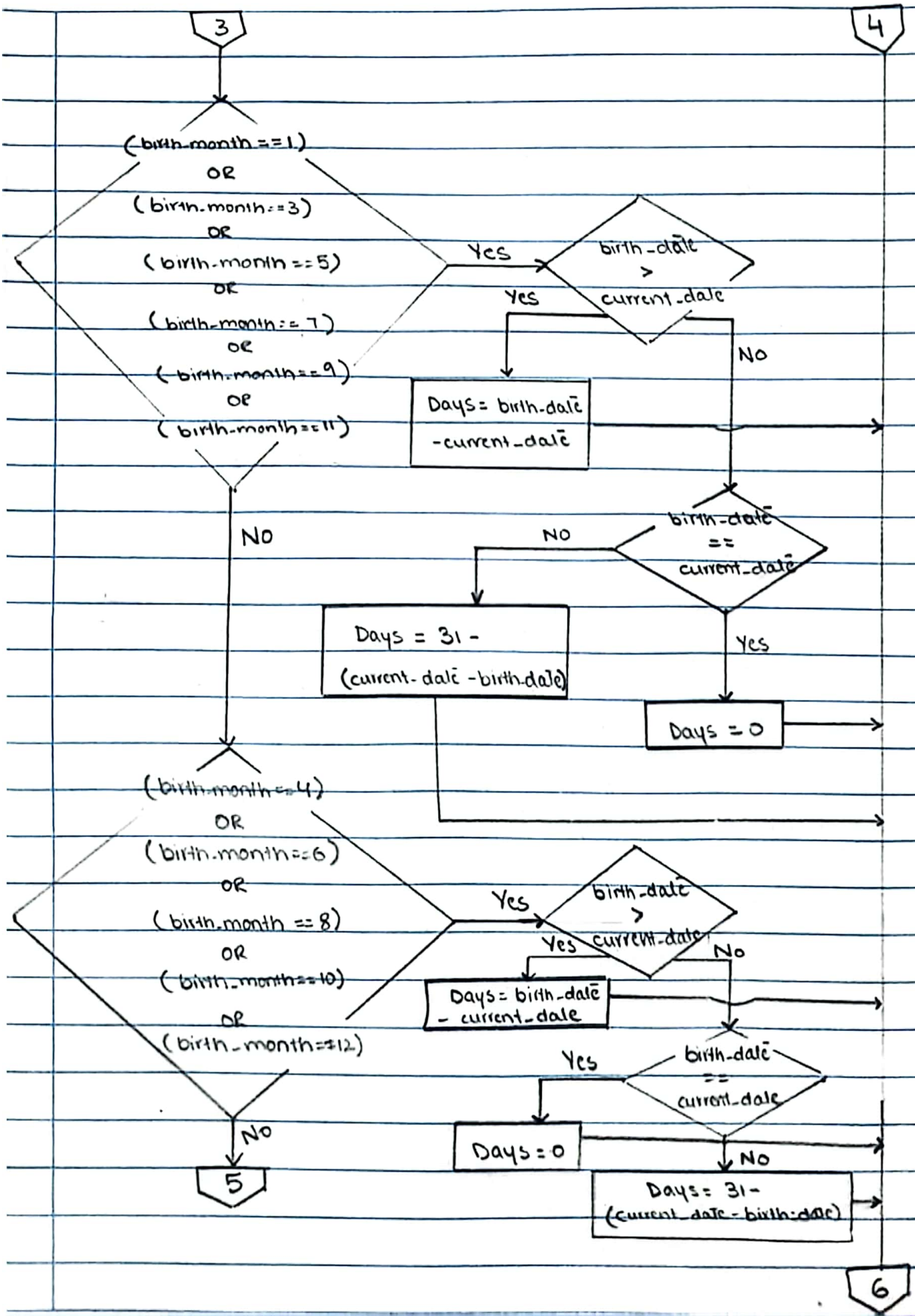
* Flowchart:



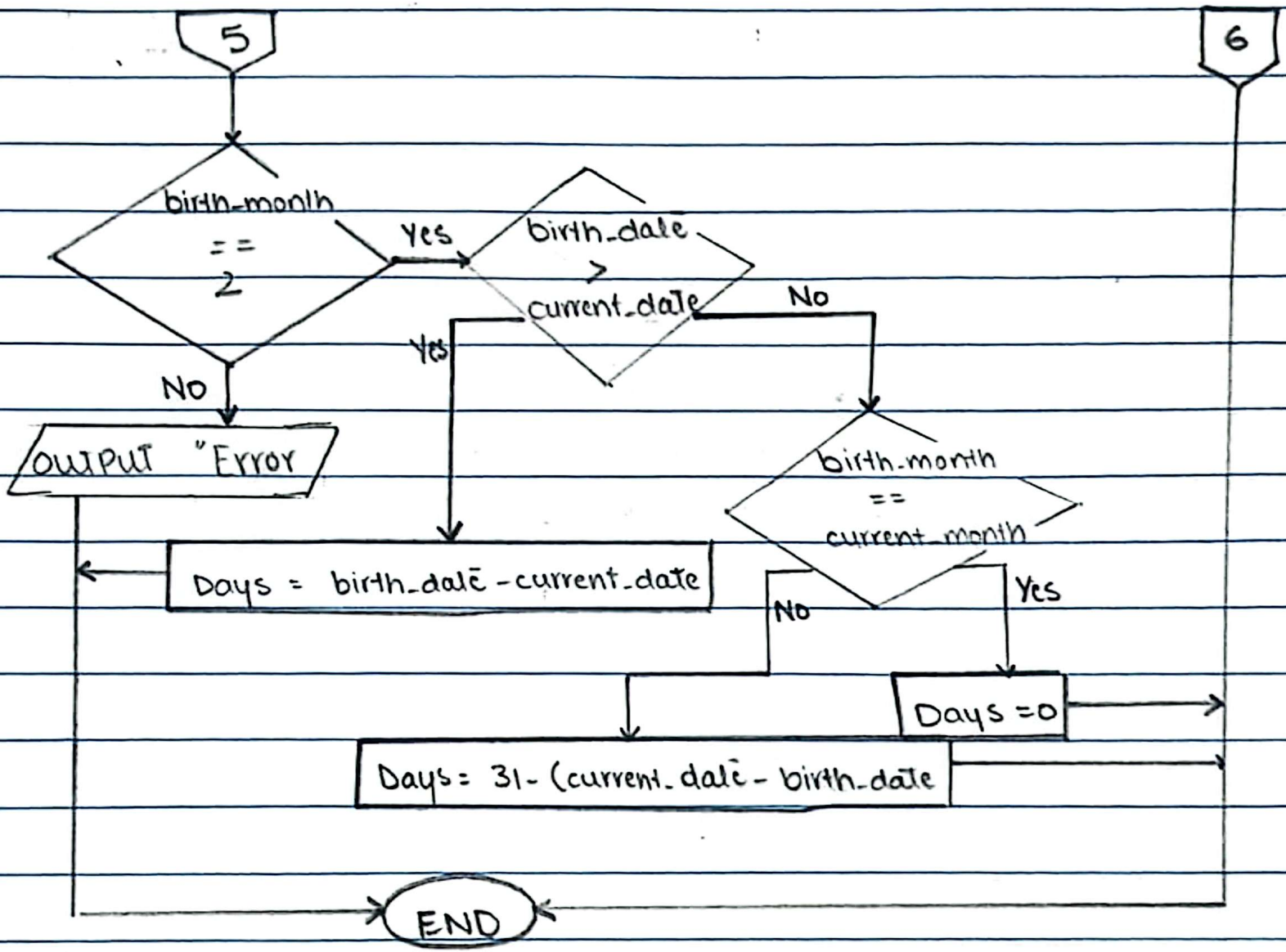
Date:


1
2
Years = current_year - birth_year
current_month > 0
AND
current_month < 13
No
Output "Error"
Yes
birth_month > 0
AND
birth_month < 13
Yes
birth_month
>
current_month
Yes
Months = birth_month - current_month
NO
birth_month
==
current_month
Yes
Months = 0
NO
Months = 12 - (current_month - birth_month)
3
4

Date:


3
4
(birth_month==1)
OR
(birth_month==3)
OR
(birth_month==5)
OR
(birth_month==7)
OR
(birth_month==9)
OR
(birth_month==11)
Yes
birth_date > current_date
Yes
No
Days = birth_date - current_date
No
birth_date == current_date
No
Days = 31 - (current_date - birth_date)
Yes
Days = 0
(birth_month==4)
OR
(birth_month==6)
OR
(birth_month==8)
OR
(birth_month==10)
OR
(birth_month==12)
Yes
birth_date > current_date
Yes
No
Days = birth_date - current_date
Yes
birth_date == current_date
Days = 0
No
Days = 31 - (current_date - birth_date)
No
5
6

Date:


5
6
birth_month
==
2
Yes
birth_date
>
current_date
No
Yes
No
OUTPUT "Error
birth_month
==
current_month
Days = birth_date - current_date
No
Yes
Days = 0
Days = 31 - (current_date - birth_date
END