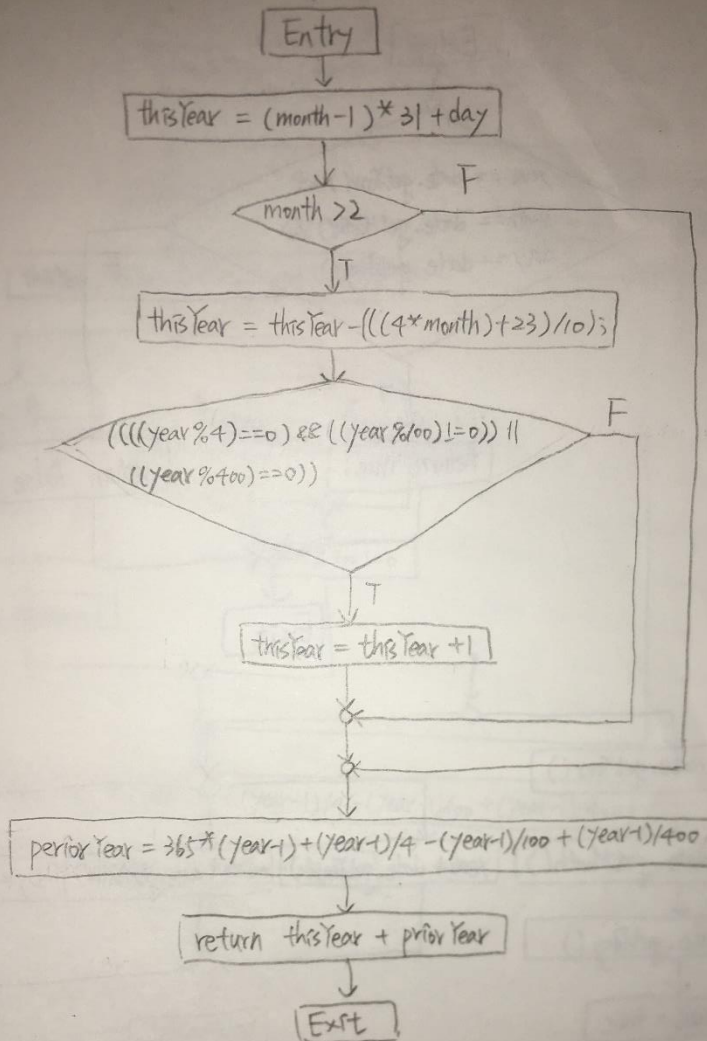
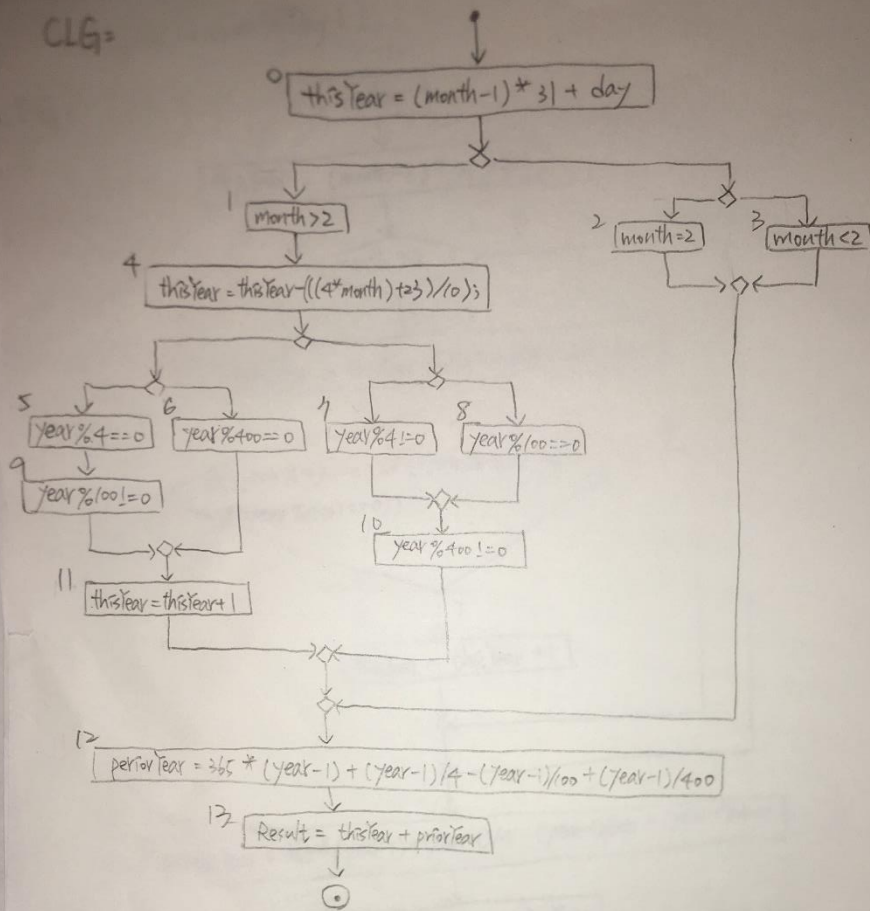


absolute Number of Day ()

CFG =



CLG=



{0, 1, 4, 5, 9, 11, 12, 13}

{0, 1, 4, 6, 11, 12, 13}

{0, 1, 4, 7, 10, 12, 13}

{0, 1, 4, 8, 10, 12, 13}

{0, 2, 12, 13}

{0, 3, 12, 13}

⇒ 共6條 Path

用 CLP 找 Test input:

CLP:

```
:- lib(ic).
testAbsoluteNumberOfDay1([Y], [M], [D]) :-
    [Y, M, D] :: -32768 .. 32767,
    Y#>=1, M#>=1, M#<12, D#>=1,
    M#>2, Y#=4*_ , Y#\=100*_ ,
    labeling([Y, M, D]).
testAbsoluteNumberOfDay2([Y], [M], [D]) :-
    [Y, M, D] :: -32768 .. 32767,
    Y#>=1, M#>=1, M#<12, D#>=1,
    M#>2, Y#=400*_ ,
    labeling([Y, M, D]).
testAbsoluteNumberOfDay3([Y], [M], [D]) :-
    [Y, M, D] :: -32768 .. 32767,
    Y#>=1, M#>=1, M#<12, D#>=1,
    M#>2, Y#\=4*_ , Y#\=400*_ ,
    labeling([Y, M, D]).
testAbsoluteNumberOfDay4([Y], [M], [D]) :-
    [Y, M, D] :: -32768 .. 32767,
    Y#>=1, M#>=1, M#<12, D#>=1,
    M#>2, Y#=100*_ , Y#\=400*_ ,
    labeling([Y, M, D]).
testAbsoluteNumberOfDay5([Y], [M], [D]) :-
    [Y, M, D] :: -32768 .. 32767,
    Y#>=1, M#>=1, M#<12, D#>=1,
    M#=2,
    labeling([Y, M, D]).
testAbsoluteNumberOfDay6([Y], [M], [D]) :-
    [Y, M, D] :: -32768 .. 32767,
    Y#>=1, M#>=1, M#<12, D#>=1,
    M#<2,
    labeling([Y, M, D]).
```

CLP solution: (Test input)

```
?- testAbsoluteNumberOfDay1(Year, Month, Day).
Year = [4]
Month = [3]
Day = [1]
Yes (0.00s cpu, solution 1, maybe more)
?- testAbsoluteNumberOfDay2(Year, Month, Day).
Year = [400]
Month = [3]
Day = [1]
Yes (0.00s cpu, solution 1, maybe more)
?- testAbsoluteNumberOfDay3(Year, Month, Day).
Year = [1]
Month = [3]
Day = [1]
Yes (0.00s cpu, solution 1, maybe more)

?- testAbsoluteNumberOfDay4(Year, Month, Day).
Year = [100]
Month = [3]
Day = [1]
Yes (0.00s cpu, solution 1, maybe more)
?- testAbsoluteNumberOfDay5(Year, Month, Day).
Year = [1]
Month = [2]
Day = [1]
Yes (0.00s cpu, solution 1, maybe more)
?- testAbsoluteNumberOfDay6(Year, Month, Day).
Year = [1]
Month = [1]
Day = [1]
Yes (0.00s cpu, solution 1, maybe more)
```

{Year=4, Month=3, Day=1}

{Year=400, Month=3, Day=1}

{Year=1, Month=3, Day=1}

{Year=100, Month=3, Day=1}

{Year=1, Month=2, Day=1}

{Year=1, Month=1, Day=1}

經模擬(OCL->CLP->solution(test output))得出 test output:

{Year=4, Month=3, Day=1} => 1156

{Year=400, Month=3, Day=1} => 145792

{Year=1, Month=3, Day=1} => 60

{Year=100, Month=3, Day=1} => 36219

{Year=1, Month=2, Day=1} => 32

{Year=1, Month=1, Day=1} => 1