```
                                    ┌───┐
                                    │ C │
                                    └───┘
                                      ↑                              ┌───┐
                                      │                              │ C │
                                >=3 UTI                              └───┘
                                    │                         Catheter patient ↑
                                    │                              │
                          ┌───┐     │              ┌───┐      ┌───┐
                          │ H │─────┤   <3 UTI     │ H │──None→│ H │
                          └───┘     └─────────────→└───┘       └───┘
                            ↑                                                    ┌───┐
                            │                                                    │ C │
                            │                                                    └───┘
                                                              Catheter patient  ↑
                       Diabetic                                      │
                            │            ┌───┐  >=3 UTI   ┌───┐      │        ┌───┐
                            │            │ M │───────────→│ H │──None→│ M │    │ H │
                   Non-diabetic          └───┘            └───┘       └───┘    └───┘
          ┌───┐               │    <3 UTI                                     ┌───┐
          │ M │───────────────┘       │                    Catheter patient   │ H │
          └───┘                       │                          │            └───┘
            ↑                         │                   ┌───┐   │
            │                         └──────────────────→│ M │───┤
          Male                                            └───┘   None→┌───┐
                                                                       │ M │
                                                                       └───┘
```

Patient Risk Initial Analysis

>60 branch:
- M → Male → C
- M → Female → H
  - Diabetic → C
  - Non-diabetic → H
    - >=3 UTI → C
    - <3 UTI → H
      - Catheter Patient → C
      - None → H

40-60 branch:
- L → Male → L
  - Diabetic → M
    - >=3 UTI → H
      - Catheter patient → C
      - None → M
    - <3 UTI → M
      - Catheter patient → H
      - None → M
  - Non-diabetic → L
    - >=3 UTI → M
      - Catheter patient → H
      - None → M
    - <3 UTI → L
      - Catheter patient → M
      - None → L
- L → Female → M
  - Diabetic → H
    - >=3 UTI → C
    - <3 UTI → H
      - Catheter patient → C
      - None → H
  - Non-diabetic → M
    - >=3 UTI → H
      - Catheter patient → C
      - None → H
    - <3 UTI → M
      - Catheter patient → H
      - None → M

18-40 branch:
- L → Male / Female → L
  - Diabetic → M
    - >=3 UTI → H
      - Catheter patient → C
      - None → M

<3 UTI

Catheter patient

M

```
M ————— None ————→ M
```

L

>=3 UTI ————→ M ——— Catheter patient ——→ H

<3 UTI

None ————→ M

L ——— Catheter patient ——→ M

None ————→ L

Once the initial risk assessment has been carried out. We need to take into account the number of days since the patient had visited.

This will be done through a recursive function-

Initial Status	Number of Days	New Status
Critical	85	High
High	60	Medium
Medium	30	Low

Number of Notifications per patient :

Status	Number of Steps	Number of notifications
Critical	-	8
High	> 3000	8
High	< 3000	6
Medium	> 3000	6
Medium	< 3000	4
Low	> 3000	4
Low	< 3000	2