

```

1 CreateModel( $H, G, step$ )
2 Let  $M$  be an empty  $m \times m$  matrix with  $m = 2|H|$ 
3 foreach  $b \in B$  do
4    $g \leftarrow G(b).first$ 
5    $L(b) \leftarrow \text{NearestState}(H, g)$ 
6 Let  $d \leftarrow G.first.date$ 
7 Let  $l \leftarrow G.last.date$ 
8 while  $d \leq l$  do
9   foreach  $b \in B$  do
10     $g \leftarrow G(b, d)$ 
11     $n \leftarrow \text{NearestState}(H, g)$ 
12    if  $n \in D \wedge L(b) \in D$  then
13       $n \leftarrow L(b)$ 
14    else if  $n \in D \wedge L(b) \in H$  then
15       $n \leftarrow L(b).departure$ 
16       $increment(M, L(b), n)$ 
17       $L(b) \leftarrow n$ 
18     $d \leftarrow Add(d, step)$ 
19 Normalize  $M$ 
20 return  $M$ 

```