

infectedNum = 0

Node [1:1000]

time-t = 0

suppose $z_{p_i} = 2005$

↳ Node [25]

Note Title

11/13/2012

```
while (infectedNum < 1000) {
```

```
    time-t++;
```

```
    for i = 1:1000,
```

```
        if (Node [i] infected?)
```

pick $h=2$ z_{ps} among $[1, 2, \dots, 100,000]$

check if z_{p_i} in those vulnerable host?

```
        }
```

```
    ...
```

```
}
```

$$\pi Q = 0$$

$$\pi \mathbf{1} = 1$$

$$(\pi_1 \dots \pi_6) Q = (0 \ 0 \ 0 \ 0 \ 0)$$

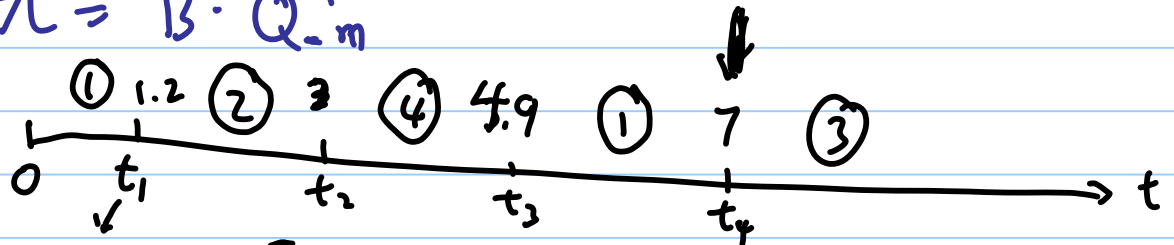
$$(\pi_1 \dots \pi_6) \begin{bmatrix} \vdots \\ \vdots \\ \vdots \end{bmatrix} = (1)$$

$$(\pi_1 \ \pi_2 \ \dots \ \pi_6) \cdot \begin{bmatrix} Q \\ \vdots \\ 1 \end{bmatrix} = [0 \ 0 \ 0 \ 0 \ 0 \ 1]$$

$\nearrow Q_{-m}$ $\nearrow B$

$$\pi = B \cdot Q_{-m}^{-1}$$

$$T = -\ln(1-U)/\lambda$$



$$\text{Tran}[\] = [1.2 \ 3 \ 4.9 \ 7]$$

$$\text{State}[\] = [2 \ 4 \ 1 \ 3]$$

$$\pi_1 = \frac{(1.2-0) + (7-4.9)}{7}$$

$$\pi_2 = \frac{(3-1.2)}{7}$$

$$\pi_5 = 0$$