Nama : Bimo argo Pratama

NIM : 2022008

mata kuliah: Sistem Operasi

1. $r_j = \sum\limits_{i \to j} \dfrac{r_i}{L_{out}(i)}$

$\sum r_i = 1$

$r_5 = \dfrac{r_{10}}{5}$

$r_6 = \dfrac{r_1}{4} + \dfrac{r_2}{2} + \dfrac{r_5}{4} + \dfrac{r_{10}}{5}$

$r_7 = \dfrac{r_4}{3} + \dfrac{r_4}{3} + \dfrac{r_{12}}{4}$

$r_8 = \dfrac{r_4}{3} + \dfrac{r_{12}}{4}$

$r_1 = \dfrac{r_5}{4}$

$r_2 = \dfrac{2r_1}{4}$

$r_3 = \dfrac{r_2}{2} + \dfrac{r_4}{3} + \dfrac{r_3}{2} + \dfrac{r_{11}}{3}$

$r_4 = \dfrac{r_1}{4} + \dfrac{r_3}{1} + \dfrac{r_{12}}{4}$

$r_9 = \dfrac{r_1}{4} + \dfrac{r_5}{4} + \dfrac{r_{10}}{5}$

$r_{10} = \dfrac{r_5}{4} + \dfrac{r_{11}}{3}$

$r_{11} = \dfrac{r_{10}}{5} + \dfrac{r_{12}}{4}$

$r_{12} = \dfrac{r_3}{2} + \dfrac{r_{10}}{5}$

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1 | 0 | 2/5 | 0 | 1/5 | 0 | 1/5 | 0 | 0 | 1/3 | 0 | 0 | 0 |
| 2 | 0 | 0 | 1/2 | 0 | 0 | 1/2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0 | 0 | 1/3 | 0 | 0 | 0 | 1/3 | 1/3 | 0 | 0 | 0 | 0 |
|   | 1/4 | 0 | 0 | 0 | 0 | 1/4 | 0 | 0 | 1/4 | 1/4 | 0 | 0 |
|   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1/4 |
|   | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|   | 0 | 0 | 0 | 0 | 1/5 | 1/5 | 0 | 0 | 1/5 | 0 | 1/5 | 1/5 |
|   | 0 | 0 | 1/3 | 0 | 0 | 0 | 1/3 | 0 | 0 | 1/3 | 0 | 0 |
|   | 0 | 0 | 0 | 1/4 | 0 | 0 | 1/4 | 1/4 | 0 | 0 | 1/4 | 0 |

$= M$

$r^{(i+1)} = r^{(i)} M$

$r = (\tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12}\ \tfrac{1}{12})$

$r' = r^0 M$

$r = 2501$

$r = (0,0,0,0,0,0,0,0,0,0,0,0)$