

### Tugas Penghitungan Algoritma Apriori

Kode / Mata Kuliah / SKS : Penambangan Data / 3 sks  
Program Studi : Teknik Informatika  
Semester / Kelas : VI / 61RK  
Dosen Pengampu : Ratih Widayanti Kosaman, S.Kom., M.Kom.  
Anggota Kelompok : 1. 082111001- Umar Musyaffa (Reguler) (TI)  
2. 082111006 - M. Revan Apriyandi (Reguler) (TI)  
3. 082111008 - Luthfiatul Silvien. G (Reguler) (TI)

| Nomor | Produk yang dibeli  |
|-------|---|
| 1     | Susu Indomilk , CDR , Indomie Goreng  |
| 2     | Roti Sharon, Susu Indomilk , Biskuit Roma   |
| 3     | Teh Sosro, Kopi ABC, Susu Indomilk , Roti Sharon                                  |
| 4     | Gulaku, Biskuit Roma, Minyak Goreng Tropical, Indomie Goreng                      |
| 5     | Roti Sharon, Indomie Goreng, Saus ABC Extra Pedas                                 |
| 6     | Gulaku, Minyak Goreng Tropical, Indomie Goreng                                    |
| 7     | Susu Indomilk , Roti Sharon, Minyak Goreng Tropical, Indomie Goreng               |
| 8     | Indomie Goreng, Minyak Goreng Tropical, Gulaku, Saus ABC Extra Pedas              |
| 9     | Indomie Goreng, Minyak Goreng Tropical, Gulaku, Saus ABC Extra Pedas, Roti Sharon |
| 10    | Kopi ABC, Roti Sharon   |
| 11    | Roti Sharon, Kopi ABC, Susu Indomilk  |
| 12    | Susu Indomilk   |
| 13    | Susu Indomilk , Roti Sharon   |

Dengan menggunakan Algoritma Apriori, tentukan aturan asosiasi yang terbentuk dari tabel transaksi diatas!

|               |   |
|---------------|---|
| Susu Indomilk | A |
|---------------|---|

|                        |   |
|------------------------|---|
| CDR                    | B |
| Indomie Goreng         | C |
| Roti Sharon            | D |
| Biskuit Roma           | E |
| The Sosro              | F |
| Kopi ABC               | G |
| Gulaku                 | H |
| Minyak Goreng Tropical | I |
| Saus ABC Extra Pedas   | J |

Mencari iterasi pertama

Dengan  $\phi = 2$

|    | A | B | C | D | E | F | G | H | I | J |
|----|---|---|---|---|---|---|---|---|---|---|
| 1  | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2  | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| 3  | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 |
| 4  | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 |
| 5  | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 6  | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| 7  | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8  | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 9  | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 |
| 10 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 11 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
|    | 7 | 1 | 7 | 7 | 2 | 1 | 3 | 4 | 5 | 3 |

## Mencari Iterasi Ke 2

|    | A | B | F |    | A | C | F |    | A | D | F |    | A | E | F |
|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 1 | 1 | S | 1  | 1 | 1 | P | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 1 | 0 | S | 2  | 1 | 0 | S | 2  | 1 | 1 | P | 2  | 1 | 1 | P |
| 3  | 1 | 0 | S | 3  | 1 | 0 | S | 3  | 1 | 1 | P | 3  | 1 | 0 | S |
| 4  | 0 | 0 | S | 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 0 | 1 | S |
| 5  | 0 | 0 | S | 5  | 0 | 1 | S | 5  | 0 | 1 | S | 5  | 0 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S |
| 7  | 1 | 0 | S | 7  | 1 | 1 | P | 7  | 1 | 1 | P | 7  | 1 | 0 | S |
| 8  | 0 | 0 | S | 8  | 0 | 1 | S | 8  | 0 | 0 | S | 8  | 0 | 0 | S |
| 9  | 0 | 0 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 0 | 0 | S |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 1 | S | 10 | 0 | 0 | S |
| 11 | 1 | 0 | S | 11 | 1 | 0 | S | 11 | 1 | 1 | P | 11 | 1 | 0 | S |
| 12 | 1 | 0 | S | 12 | 1 | 0 | S | 12 | 1 | 0 | S | 12 | 1 | 0 | S |
| 13 | 1 | 0 | S | 13 | 1 | 0 | S | 13 | 1 | 1 | P | 13 | 1 | 0 | S |
|    |   |   | 1 |    |   |   | 2 |    |   |   | 5 |    |   |   | 1 |
|    | A | I | F |    | A | J | F |    | B | C | F |    | B | D | F |
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 1 | S | 1  | 1 | 0 | S |
| 2  | 1 | 0 | S | 2  | 1 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 1 | S |
| 3  | 1 | 0 | S | 3  | 1 | 0 | S | 3  | 0 | 0 | S | 3  | 0 | 1 | S |
| 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 0 | 1 | S | 4  | 0 | 0 | S |
| 5  | 0 | 0 | S | 5  | 0 | 1 | S | 5  | 0 | 1 | S | 5  | 0 | 1 | S |
| 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 0 | 1 | S | 6  | 0 | 0 | S |
| 7  | 1 | 1 | S | 7  | 1 | 0 | S | 7  | 0 | 1 | S | 7  | 0 | 1 | S |
| 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 0 | 0 | S |
| 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 1 | S |
| 11 | 1 | 0 | S | 11 | 1 | 0 | S | 11 | 0 | 0 | S | 11 | 0 | 1 | S |
| 12 | 1 | 0 | S | 12 | 1 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 1 | 0 | S | 13 | 1 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 1 | S |
|    |   |   | 0 |    |   |   | 0 |    |   |   | 0 |    |   |   | 0 |
|    | B | H | F |    | B | I | F |    | B | J | F |    | C | D | F |
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 1 | S |
| 3  | 0 | 0 | S | 3  | 0 | 0 | S | 3  | 0 | 0 | S | 3  | 0 | 1 | S |
| 4  | 0 | 1 | S | 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 1 | 0 | S |
| 5  | 0 | 0 | S | 5  | 0 | 0 | S | 5  | 0 | 1 | S | 5  | 1 | 1 | S |
| 6  | 0 | 1 | S | 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 1 | 0 | S |
| 7  | 0 | 0 | S | 7  | 0 | 1 | S | 7  | 0 | 0 | S | 7  | 1 | 1 | S |
| 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 1 | 0 | S |
| 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 1 | 1 | P |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 1 | S |
| 11 | 0 | 0 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S | 11 | 0 | 1 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 1 | S |
|    |   |   | 0 |    |   |   | 0 |    |   |   | 0 |    |   |   | 1 |

|    | C | H | F |    | C | I | F |    | C | J | F |
|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 0 | S |
| 3  | 0 | 0 | S | 3  | 0 | 0 | S | 3  | 0 | 0 | S |
| 4  | 1 | 1 | P | 4  | 1 | 1 | P | 4  | 1 | 0 | S |
| 5  | 1 | 0 | S | 5  | 1 | 0 | S | 5  | 1 | 1 | P |
| 6  | 1 | 1 | P | 6  | 1 | 1 | P | 6  | 1 | 0 | S |
| 7  | 1 | 0 | S | 7  | 1 | 1 | P | 7  | 1 | 0 | S |
| 8  | 1 | 1 | P | 8  | 1 | 1 | P | 8  | 1 | 1 | P |
| 9  | 1 | 1 | P | 9  | 1 | 1 | P | 9  | 1 | 1 | P |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 0 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 2 |    |   |   | 5 |    |   |   | 3 |
|    | D | I | F |    | D | J | F |    | E | S | F |
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 1 | 0 | S | 2  | 1 | 0 | S | 2  | 1 | 0 | S |
| 3  | 1 | 0 | S | 3  | 1 | 0 | S | 3  | 0 | 1 | S |
| 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 1 | 0 | S |
| 5  | 1 | 0 | S | 5  | 1 | 1 | P | 5  | 0 | 0 | S |
| 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S |
| 7  | 1 | 1 | P | 7  | 1 | 0 | S | 7  | 0 | 0 | S |
| 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 0 | 0 | S |
| 9  | 1 | 1 | P | 9  | 1 | 1 | P | 9  | 0 | 0 | S |
| 10 | 1 | 0 | S | 10 | 1 | 0 | S | 10 | 0 | 0 | S |
| 11 | 1 | 0 | S | 11 | 1 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 1 | 0 | S | 13 | 1 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 2 |    |   |   | 2 |    |   |   | 0 |
|    | S | G | F |    | S | H | F |    | S | I | F |
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 0 | S |
| 3  | 1 | 1 | P | 3  | 1 | 0 | S | 3  | 1 | 0 | S |
| 4  | 0 | 0 | S | 4  | 0 | 1 | S | 4  | 0 | 1 | S |
| 5  | 0 | 0 | S | 5  | 0 | 0 | S | 5  | 0 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 1 | S | 6  | 0 | 1 | S |
| 7  | 0 | 0 | S | 7  | 0 | 0 | S | 7  | 0 | 1 | S |
| 8  | 0 | 0 | S | 8  | 0 | 1 | S | 8  | 0 | 1 | S |
| 9  | 0 | 0 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S |
| 10 | 0 | 1 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 1 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 0 |    |   |   |   |    |   |   | 0 |
|    | H | I | F |    | H | J | F |    | I | J | F |
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 0 | S |
| 3  | 0 | 0 | S | 3  | 0 | 0 | S | 3  | 0 | 0 | S |
| 4  | 1 | 1 | P | 4  | 1 | 0 | S | 4  | 1 | 0 | S |
| 5  | 0 | 0 | S | 5  | 0 | 1 | S | 5  | 0 | 1 | S |
| 6  | 1 | 1 | S | 6  | 1 | 0 | S | 6  | 1 | 0 | S |
| 7  | 0 | 1 | S | 7  | 0 | 0 | S | 7  | 1 | 0 | S |
| 8  | 1 | 1 | P | 8  | 1 | 1 | P | 8  | 1 | 1 | P |
| 9  | 1 | 1 | P | 9  | 1 | 1 | P | 9  | 1 | 1 | P |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 0 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 3 |    |   |   | 2 |    |   |   | 2 |

|    | A | E | F |    | A | S | F |    | A | G | F |
|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 1 | 1 | P | 2  | 1 | 0 | S | 2  | 1 | 0 | S |
| 3  | 1 | 0 | S | 3  | 1 | 1 | P | 3  | 1 | 1 | P |
| 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 0 | 0 | S |
| 5  | 0 | 0 | S | 5  | 0 | 0 | S | 5  | 0 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S |
| 7  | 1 | 0 | S | 7  | 1 | 0 | S | 7  | 1 | 0 | S |
| 8  | 0 | 0 | S | 8  | 0 | 0 | S | 8  | 0 | 0 | S |
| 9  | 0 | 0 | S | 9  | 0 | 0 | S | 9  | 0 | 0 | S |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 0 | 1 | S |
| 11 | 1 | 0 | S | 11 | 1 | 0 | S | 11 | 1 | 1 | P |
| 12 | 1 | 0 | S | 12 | 1 | 0 | S | 12 | 1 | 0 | S |
| 13 | 1 | 0 | S | 13 | 1 | 0 | S | 13 | 1 | 0 | S |
|    |   |   | 1 |    |   |   |   |    |   |   | 2 |
|    | B | D | F |    | B | E | F |    | B | S | F |
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 0 | 1 | S | 2  | 0 | 1 | S | 2  | 0 | 0 | S |
| 3  | 0 | 1 | S | 3  | 0 | 0 | S | 3  | 0 | 1 | S |
| 4  | 0 | 0 | S | 4  | 0 | 1 | S | 4  | 0 | 0 | S |
| 5  | 0 | 1 | S | 5  | 0 | 0 | S | 5  | 0 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S |
| 7  | 0 | 1 | S | 7  | 0 | 0 | S | 7  | 0 | 0 | S |
| 8  | 0 | 0 | S | 8  | 0 | 0 | S | 8  | 0 | 0 | S |
| 9  | 0 | 1 | S | 9  | 0 | 0 | S | 9  | 0 | 0 | S |
| 10 | 0 | 1 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 1 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 1 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 0 |    |   |   | 0 |    |   |   | 0 |
|    | C | D | F |    | C | E | F |    | C | S | F |
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 0 | 1 | S | 2  | 0 | 1 | S | 2  | 0 | 0 | S |
| 3  | 0 | 1 | S | 3  | 0 | 0 | S | 3  | 0 | 1 | S |
| 4  | 1 | 0 | S | 4  | 1 | 1 | P | 4  | 1 | 0 | S |
| 5  | 1 | 1 | S | 5  | 1 | 0 | S | 5  | 1 | 0 | S |
| 6  | 1 | 0 | S | 6  | 1 | 0 | S | 6  | 1 | 0 | S |
| 7  | 1 | 1 | S | 7  | 1 | 0 | S | 7  | 1 | 0 | S |
| 8  | 1 | 0 | S | 8  | 1 | 0 | S | 8  | 1 | 0 | S |
| 9  | 1 | 1 | P | 9  | 1 | 0 | S | 9  | 1 | 0 | S |
| 10 | 0 | 1 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 1 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 1 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 1 |    |   |   | 1 |    |   |   | 0 |

|    | D | E | F |    | D | S | F |    | D | G | F |
|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 1 | 1 | P | 2  | 1 | 0 | S | 2  | 1 | 0 | S |
| 3  | 1 | 0 | S | 3  | 1 | 1 | P | 3  | 1 | 1 | P |
| 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 0 | 0 | S |
| 5  | 1 | 0 | S | 5  | 1 | 0 | S | 5  | 1 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S |
| 7  | 1 | 0 | S | 7  | 1 | 0 | S | 7  | 1 | 0 | S |
| 8  | 0 | 0 | S | 8  | 0 | 0 | S | 8  | 0 | 0 | S |
| 9  | 1 | 0 | S | 9  | 1 | 0 | S | 9  | 1 | 0 | S |
| 10 | 1 | 0 | S | 10 | 1 | 0 | S | 10 | 1 | 1 | S |
| 11 | 1 | 0 | S | 11 | 1 | 0 | S | 11 | 1 | 1 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 1 | 0 | S | 13 | 1 | 0 | S | 13 | 1 | 0 | S |
|    |   |   | 1 |    |   |   | 1 |    |   |   | 3 |
|    | E | G | F |    | E | H | F |    | E | I | S |
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 1 | 0 | S | 2  | 1 | 0 | S | 2  | 1 | 0 | S |
| 3  | 0 | 1 | S | 3  | 0 | 0 | S | 3  | 0 | 0 | S |
| 4  | 1 | 0 | S | 4  | 1 | 1 | P | 4  | 1 | 1 | P |
| 5  | 0 | 0 | S | 5  | 0 | 0 | S | 5  | 0 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 1 | S | 6  | 0 | 1 | S |
| 7  | 0 | 0 | S | 7  | 0 | 0 | S | 7  | 0 | 1 | S |
| 8  | 0 | 0 | S | 8  | 0 | 1 | S | 8  | 0 | 1 | S |
| 9  | 0 | 0 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S |
| 10 | 0 | 1 | S | 10 | 0 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 1 | S | 11 | 0 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 0 |    |   |   | 1 |    |   |   | 1 |
|    | S | J | F |    | G | H | F |    | G | I | F |
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 0 | S |
| 3  | 1 | 0 | S | 3  | 1 | 0 | S | 3  | 1 | 0 | S |
| 4  | 0 | 0 | S | 4  | 0 | 1 | S | 4  | 0 | 1 | S |
| 5  | 0 | 1 | S | 5  | 0 | 0 | S | 5  | 0 | 0 | S |
| 6  | 0 | 0 | S | 6  | 0 | 1 | S | 6  | 0 | 1 | S |
| 7  | 0 | 0 | S | 7  | 0 | 0 | S | 7  | 0 | 1 | S |
| 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 0 | 1 | S |
| 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 0 | 1 | S |
| 10 | 0 | 0 | S | 10 | 1 | 0 | S | 10 | 1 | 0 | S |
| 11 | 0 | 0 | S | 11 | 1 | 0 | S | 11 | 1 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 0 |    |   |   | 0 |    |   |   | 0 |

|    | A | H | F |    | B | G | F |    | C | G | F |
|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 1 | 0 | S | 2  | 0 | 0 | S | 2  | 0 | 0 | S |
| 3  | 1 | 0 | S | 3  | 0 | 1 | S | 3  | 0 | 1 | S |
| 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 1 | 0 | S |
| 5  | 0 | 0 | S | 5  | 0 | 0 | S | 5  | 1 | 0 | S |
| 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 1 | 0 | S |
| 7  | 1 | 0 | S | 7  | 0 | 0 | S | 7  | 1 | 0 | S |
| 8  | 0 | 1 | S | 8  | 0 | 0 | S | 8  | 1 | 0 | S |
| 9  | 0 | 1 | S | 9  | 0 | 0 | S | 9  | 1 | 0 | S |
| 10 | 0 | 0 | S | 10 | 0 | 1 | S | 10 | 0 | 1 | S |
| 11 | 1 | 0 | S | 11 | 0 | 1 | S | 11 | 0 | 1 | S |
| 12 | 1 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 1 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 0 |    |   |   | 0 |    |   |   | 0 |

|    | D | H | F |    | E | J | F |    | G | J | F |
|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 1 | 0 | S | 2  | 1 | 0 | S | 2  | 0 | 0 | S |
| 3  | 1 | 0 | S | 3  | 0 | 0 | S | 3  | 1 | 0 | S |
| 4  | 0 | 1 | S | 4  | 1 | 0 | S | 4  | 0 | 0 | S |
| 5  | 1 | 0 | S | 5  | 0 | 1 | S | 5  | 0 | 1 | S |
| 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S |
| 7  | 1 | 0 | S | 7  | 0 | 0 | S | 7  | 0 | 0 | S |
| 8  | 0 | 1 | S | 8  | 0 | 1 | S | 8  | 0 | 1 | S |
| 9  | 1 | 1 | P | 9  | 0 | 1 | S | 9  | 0 | 1 | S |
| 10 | 1 | 0 | S | 10 | 0 | 0 | S | 10 | 1 | 0 | S |
| 11 | 1 | 0 | S | 11 | 0 | 0 | S | 11 | 1 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 1 | 0 | S | 13 | 0 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 1 |    |   |   | 0 |    |   |   | 0 |

  

|    | C | D | F |
|----|---|---|---|
| 1  | 1 | 0 | S |
| 2  | 0 | 1 | S |
| 3  | 0 | 1 | S |
| 4  | 1 | 0 | S |
| 5  | 1 | 1 | P |
| 6  | 1 | 0 | S |
| 7  | 1 | 1 | S |
| 8  | 1 | 0 | S |
| 9  | 1 | 1 | P |
| 10 | 0 | 1 | S |
| 11 | 0 | 1 | S |
| 12 | 0 | 0 | S |
| 13 | 0 | 1 | S |
|    |   |   | 2 |

Hasil Iterasi Ke 2

|    | A | C | F |    | A | D | F |    | A | G | F |    | C | I | F |
|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 1 | 1 | P | 1  | 1 | 0 | S | 1  | 1 | 0 | S | 1  | 1 | 0 | S |
| 2  | 1 | 0 | S | 2  | 1 | 1 | P | 2  | 1 | 0 | S | 2  | 0 | 0 | S |
| 3  | 1 | 0 | S | 3  | 1 | 1 | P | 3  | 1 | 1 | P | 3  | 0 | 0 | S |
| 4  | 0 | 1 | S | 4  | 0 | 0 | S | 4  | 0 | 0 | S | 4  | 1 | 1 | P |
| 5  | 0 | 1 | S | 5  | 0 | 1 | S | 5  | 0 | 0 | S | 5  | 1 | 0 | S |
| 6  | 0 | 1 | S | 6  | 0 | 0 | S | 6  | 0 | 0 | S | 6  | 1 | 1 | P |
| 7  | 1 | 1 | P | 7  | 1 | 1 | P | 7  | 1 | 0 | S | 7  | 1 | 1 | P |
| 8  | 0 | 1 | S | 8  | 0 | 0 | S | 8  | 0 | 0 | S | 8  | 1 | 1 | P |
| 9  | 0 | 1 | S | 9  | 0 | 1 | S | 9  | 0 | 0 | S | 9  | 1 | 1 | P |
| 10 | 0 | 0 | S | 10 | 0 | 1 | S | 10 | 0 | 1 | S | 10 | 0 | 0 | S |
| 11 | 1 | 0 | S | 11 | 1 | 1 | P | 11 | 1 | 1 | P | 11 | 0 | 0 | S |
| 12 | 1 | 0 | S | 12 | 1 | 0 | S | 12 | 1 | 0 | S | 12 | 0 | 0 | S |
| 13 | 1 | 0 | S | 13 | 1 | 1 | P | 13 | 1 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 2 |    |   |   | 5 |    |   |   | 2 |    |   |   | 5 |

|    | C | J | F |    | D | J | F |    | C | H | F |
|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 1 | 0 | S | 1  | 0 | 0 | S | 1  | 1 | 0 | S |
| 2  | 0 | 0 | S | 2  | 1 | 0 | S | 2  | 0 | 0 | S |
| 3  | 0 | 0 | S | 3  | 1 | 0 | S | 3  | 0 | 0 | S |
| 4  | 1 | 0 | S | 4  | 0 | 0 | S | 4  | 1 | 1 | P |
| 5  | 1 | 1 | P | 5  | 1 | 1 | P | 5  | 1 | 0 | S |
| 6  | 1 | 0 | S | 6  | 0 | 0 | S | 6  | 1 | 1 | P |
| 7  | 1 | 0 | S | 7  | 1 | 0 | S | 7  | 1 | 0 | S |
| 8  | 1 | 1 | P | 8  | 0 | 1 | S | 8  | 1 | 1 | P |
| 9  | 1 | 1 | P | 9  | 1 | 1 | P | 9  | 1 | 1 | P |
| 10 | 0 | 0 | S | 10 | 1 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 0 | S | 11 | 1 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 1 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 3 |    |   |   | 2 |    |   |   | 2 |

|    | C | D | F |
|----|---|---|---|
| 1  | 1 | 0 | S |
| 2  | 0 | 1 | S |
| 3  | 0 | 1 | S |
| 4  | 1 | 0 | S |
| 5  | 1 | 1 | P |
| 6  | 1 | 0 | S |
| 7  | 1 | 1 | S |
| 8  | 1 | 0 | S |
| 9  | 1 | 1 | P |
| 10 | 0 | 1 | S |
| 11 | 0 | 1 | S |
| 12 | 0 | 0 | S |
| 13 | 0 | 1 | S |
|    |   |   | 2 |

|    | H | J | F |    | I | J | F |    | D | I | F |    | H | I | F |
|----|---|---|---|----|---|---|---|----|---|---|---|----|---|---|---|
| 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S | 1  | 0 | 0 | S |
| 2  | 0 | 0 | S | 2  | 0 | 0 | S | 2  | 1 | 0 | S | 2  | 0 | 0 | S |
| 3  | 0 | 0 | S | 3  | 0 | 0 | S | 3  | 1 | 0 | S | 3  | 0 | 0 | S |
| 4  | 1 | 0 | S | 4  | 1 | 0 | S | 4  | 0 | 1 | S | 4  | 1 | 1 | P |
| 5  | 0 | 1 | S | 5  | 0 | 1 | S | 5  | 1 | 0 | S | 5  | 0 | 0 | S |
| 6  | 1 | 0 | S | 6  | 1 | 0 | S | 6  | 0 | 1 | S | 6  | 1 | 1 | S |
| 7  | 0 | 0 | S | 7  | 1 | 0 | S | 7  | 1 | 1 | P | 7  | 0 | 1 | S |
| 8  | 1 | 1 | P | 8  | 1 | 1 | P | 8  | 0 | 1 | S | 8  | 1 | 1 | P |
| 9  | 1 | 1 | P | 9  | 1 | 1 | P | 9  | 1 | 1 | P | 9  | 1 | 1 | P |
| 10 | 0 | 0 | S | 10 | 0 | 0 | S | 10 | 1 | 0 | S | 10 | 0 | 0 | S |
| 11 | 0 | 0 | S | 11 | 0 | 0 | S | 11 | 1 | 0 | S | 11 | 0 | 0 | S |
| 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S | 12 | 0 | 0 | S |
| 13 | 0 | 0 | S | 13 | 0 | 0 | S | 13 | 1 | 0 | S | 13 | 0 | 0 | S |
|    |   |   | 2 |    |   |   | 2 |    |   |   | 2 |    |   |   | 3 |

Mencari Iterasi Ke 3



|    | A | C | D |   |    | A | C | G |   |    | A | C | I |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 1 | 0 | S | 1  | 1 | 1 | 0 | S | 1  | 1 | 1 | 0 | S |
| 2  | 1 | 0 | 1 | S | 2  | 1 | 0 | 0 | S | 2  | 1 | 0 | 0 | S |
| 3  | 1 | 0 | 1 | S | 3  | 1 | 0 | 1 | S | 3  | 1 | 0 | 0 | S |
| 4  | 0 | 1 | 0 | S | 4  | 0 | 1 | 0 | S | 4  | 0 | 1 | 1 | S |
| 5  | 0 | 1 | 1 | S | 5  | 0 | 1 | 0 | S | 5  | 0 | 1 | 0 | S |
| 6  | 0 | 1 | 0 | S | 6  | 0 | 1 | 0 | S | 6  | 0 | 1 | 1 | S |
| 7  | 1 | 1 | 1 | P | 7  | 1 | 1 | 0 | S | 7  | 1 | 1 | 1 | P |
| 8  | 0 | 1 | 0 | S | 8  | 0 | 1 | 0 | S | 8  | 0 | 1 | 1 | S |
| 9  | 0 | 1 | 1 | S | 9  | 0 | 1 | 0 | S | 9  | 0 | 1 | 1 | S |
| 10 | 0 | 0 | 1 | S | 10 | 0 | 0 | 1 | S | 10 | 0 | 0 | 0 | S |
| 11 | 1 | 0 | 1 | S | 11 | 1 | 0 | 1 | S | 11 | 1 | 0 | 0 | S |
| 12 | 1 | 0 | 0 | S | 12 | 1 | 0 | 0 | S | 12 | 1 | 0 | 0 | S |
| 13 | 1 | 0 | 1 | S | 13 | 1 | 0 | 0 | S | 13 | 1 | 0 | 0 | S |
|    |   |   |   | 1 |    |   |   |   | 0 |    |   |   |   | 1 |

|    | A | H | J |   |    | A | D | G |   |    | A | D | I |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S |
| 2  | 1 | 0 | 0 | S | 2  | 1 | 1 | 0 | S | 2  | 1 | 1 | 0 | S |
| 3  | 1 | 0 | 0 | S | 3  | 1 | 1 | 1 | P | 3  | 1 | 1 | 0 | S |
| 4  | 0 | 1 | 0 | S | 4  | 0 | 0 | 0 | S | 4  | 0 | 0 | 1 | S |
| 5  | 0 | 0 | 1 | S | 5  | 0 | 1 | 0 | S | 5  | 0 | 1 | 0 | S |
| 6  | 0 | 1 | 0 | S | 6  | 0 | 0 | 0 | S | 6  | 0 | 0 | 1 | S |
| 7  | 1 | 0 | 0 | S | 7  | 1 | 1 | 0 | S | 7  | 1 | 1 | 1 | P |
| 8  | 0 | 1 | 1 | S | 8  | 0 | 0 | 0 | S | 8  | 0 | 0 | 1 | S |
| 9  | 0 | 1 | 1 | S | 9  | 0 | 1 | 0 | S | 9  | 0 | 1 | 1 | S |
| 10 | 0 | 0 | 0 | S | 10 | 0 | 1 | 1 | S | 10 | 0 | 1 | 0 | S |
| 11 | 1 | 0 | 0 | S | 11 | 1 | 1 | 1 | P | 11 | 1 | 1 | 0 | S |
| 12 | 1 | 0 | 0 | S | 12 | 1 | 0 | 0 | S | 12 | 1 | 0 | 0 | S |
| 13 | 1 | 0 | 0 | S | 13 | 1 | 1 | 0 | S | 13 | 1 | 1 | 0 | S |
|    |   |   |   | 0 |    |   |   |   | 2 |    |   |   |   | 1 |

|    | A | C | J |   |    | A | D | J |   |    | C | H | G |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 1 | 0 | S | 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S |
| 2  | 1 | 0 | 0 | S | 2  | 1 | 1 | 0 | S | 2  | 0 | 0 | 0 | S |
| 3  | 1 | 0 | 0 | S | 3  | 1 | 1 | 0 | S | 3  | 0 | 0 | 1 | S |
| 4  | 0 | 1 | 0 | S | 4  | 0 | 0 | 0 | S | 4  | 1 | 1 | 0 | S |
| 5  | 0 | 1 | 1 | S | 5  | 0 | 1 | 1 | S | 5  | 1 | 0 | 0 | S |
| 6  | 0 | 1 | 0 | S | 6  | 0 | 0 | 0 | S | 6  | 1 | 1 | 0 | S |
| 7  | 1 | 1 | 0 | S | 7  | 1 | 1 | 0 | S | 7  | 1 | 0 | 0 | S |
| 8  | 0 | 1 | 1 | S | 8  | 0 | 0 | 1 | S | 8  | 1 | 1 | 0 | S |
| 9  | 0 | 1 | 1 | S | 9  | 0 | 1 | 1 | S | 9  | 1 | 1 | 0 | S |
| 10 | 0 | 0 | 0 | S | 10 | 0 | 1 | 0 | S | 10 | 0 | 0 | 1 | S |
| 11 | 1 | 0 | 0 | S | 11 | 1 | 1 | 0 | S | 11 | 0 | 0 | 1 | S |
| 12 | 1 | 0 | 0 | S | 12 | 1 | 0 | 0 | S | 12 | 0 | 0 | 0 | S |
| 13 | 1 | 0 | 0 | S | 13 | 1 | 1 | 0 | S | 13 | 0 | 0 | 0 | S |
|    |   |   |   | 0 |    |   |   |   | 0 |    |   |   |   | 0 |

|    | A | G | I |   |    | A | G | J |   |    | C | H | D |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S |
| 2  | 1 | 0 | 0 | S | 2  | 1 | 0 | 0 | S | 2  | 0 | 0 | 1 | S |
| 3  | 1 | 1 | 0 | S | 3  | 1 | 1 | 0 | S | 3  | 0 | 0 | 1 | S |
| 4  | 0 | 0 | 1 | S | 4  | 0 | 0 | 0 | S | 4  | 1 | 1 | 0 | S |
| 5  | 0 | 0 | 0 | S | 5  | 0 | 0 | 1 | S | 5  | 1 | 0 | 1 | S |
| 6  | 0 | 0 | 1 | S | 6  | 0 | 0 | 0 | S | 6  | 1 | 1 | 0 | S |
| 7  | 1 | 0 | 1 | S | 7  | 1 | 0 | 0 | S | 7  | 1 | 0 | 1 | S |
| 8  | 0 | 0 | 1 | S | 8  | 0 | 0 | 1 | S | 8  | 1 | 1 | 0 | S |
| 9  | 0 | 0 | 1 | S | 9  | 0 | 0 | 1 | S | 9  | 1 | 1 | 1 | P |
| 10 | 0 | 1 | 0 | S | 10 | 0 | 1 | 0 | S | 10 | 0 | 0 | 1 | S |
| 11 | 1 | 1 | 0 | S | 11 | 1 | 1 | 0 | S | 11 | 0 | 0 | 1 | S |
| 12 | 1 | 0 | 0 | S | 12 | 1 | 0 | 0 | S | 12 | 0 | 0 | 0 | S |
| 13 | 1 | 0 | 0 | S | 13 | 1 | 0 | 0 | S | 13 | 0 | 0 | 1 | S |
|    |   |   |   | 0 |    |   |   |   | 0 |    |   |   |   | 1 |

|    | A | G | H |   |    | C | I | J |   |    | C | I | D |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S |
| 2  | 1 | 0 | 0 | S | 2  | 0 | 0 | 0 | S | 2  | 0 | 0 | 1 | S |
| 3  | 1 | 1 | 0 | S | 3  | 0 | 0 | 0 | S | 3  | 0 | 0 | 1 | S |
| 4  | 0 | 0 | 1 | S | 4  | 1 | 1 | 0 | S | 4  | 1 | 1 | 0 | S |
| 5  | 0 | 0 | 0 | S | 5  | 1 | 0 | 1 | S | 5  | 1 | 0 | 1 | S |
| 6  | 0 | 0 | 1 | S | 6  | 1 | 1 | 0 | S | 6  | 1 | 1 | 0 | S |
| 7  | 1 | 0 | 0 | S | 7  | 1 | 1 | 0 | S | 7  | 1 | 1 | 1 | S |
| 8  | 0 | 0 | 1 | S | 8  | 1 | 1 | 1 | S | 8  | 1 | 1 | 0 | S |
| 9  | 0 | 0 | 1 | S | 9  | 1 | 1 | 1 | S | 9  | 1 | 1 | 1 | S |
| 10 | 0 | 1 | 0 | S | 10 | 0 | 0 | 0 | S | 10 | 0 | 0 | 1 | S |
| 11 | 1 | 1 | 0 | S | 11 | 0 | 0 | 0 | S | 11 | 0 | 0 | 1 | S |
| 12 | 1 | 0 | 0 | S | 12 | 0 | 0 | 0 | S | 12 | 0 | 0 | 0 | S |
| 13 | 1 | 0 | 0 | S | 13 | 0 | 0 | 0 | S | 13 | 0 | 0 | 1 | S |
|    |   |   |   | 0 |    |   |   |   | 0 |    |   |   |   | 0 |

|    | C | H | J |   |    | D | H | J |   |    | H | I | G |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S | 1  | 0 | 0 | 0 | S | 1  | 0 | 0 | 0 | S |
| 2  | 0 | 0 | 0 | S | 2  | 1 | 0 | 0 | S | 2  | 0 | 0 | 0 | S |
| 3  | 0 | 0 | 0 | S | 3  | 1 | 0 | 0 | S | 3  | 0 | 0 | 1 | S |
| 4  | 1 | 1 | 0 | S | 4  | 0 | 1 | 0 | S | 4  | 1 | 1 | 0 | S |
| 5  | 1 | 0 | 1 | S | 5  | 1 | 0 | 1 | S | 5  | 0 | 0 | 0 | S |
| 6  | 1 | 1 | 0 | S | 6  | 0 | 1 | 0 | S | 6  | 1 | 1 | 0 | S |
| 7  | 1 | 0 | 0 | S | 7  | 1 | 0 | 0 | S | 7  | 0 | 1 | 0 | S |
| 8  | 1 | 1 | 1 | P | 8  | 0 | 1 | 1 | S | 8  | 1 | 1 | 0 | S |
| 9  | 1 | 1 | 1 | P | 9  | 1 | 1 | 1 | P | 9  | 1 | 1 | 0 | S |
| 10 | 0 | 0 | 0 | S | 10 | 1 | 0 | 0 | S | 10 | 0 | 0 | 1 | S |
| 11 | 0 | 0 | 0 | S | 11 | 1 | 0 | 0 | S | 11 | 0 | 0 | 1 | S |
| 12 | 0 | 0 | 0 | S | 12 | 0 | 0 | 0 | S | 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 0 | S | 13 | 1 | 0 | 0 | S | 13 | 0 | 0 | 0 | S |
|    |   |   |   | 2 |    |   |   |   | 1 |    |   |   |   | 0 |

|    | C | I | H |   |    | C | J | D |   |    | H | I | J |   |
|----|---|---|---|---|----|---|---|---|---|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S | 1  | 1 | 0 | 0 | S | 1  | 0 | 0 | 0 | S |
| 2  | 0 | 0 | 0 | S | 2  | 0 | 0 | 1 | S | 2  | 0 | 0 | 0 | S |
| 3  | 0 | 0 | 0 | S | 3  | 0 | 0 | 1 | S | 3  | 0 | 0 | 0 | S |
| 4  | 1 | 1 | 1 | S | 4  | 1 | 0 | 0 | S | 4  | 1 | 1 | 0 | S |
| 5  | 1 | 0 | 0 | S | 5  | 1 | 1 | 1 | P | 5  | 0 | 0 | 1 | S |
| 6  | 1 | 1 | 1 | S | 6  | 1 | 0 | 0 | S | 6  | 1 | 1 | 0 | S |
| 7  | 1 | 1 | 0 | S | 7  | 1 | 0 | 1 | S | 7  | 0 | 1 | 0 | S |
| 8  | 1 | 1 | 1 | P | 8  | 1 | 1 | 0 | S | 8  | 1 | 1 | 1 | P |
| 9  | 1 | 1 | 1 | P | 9  | 1 | 1 | 1 | P | 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 0 | S | 10 | 0 | 0 | 1 | S | 10 | 0 | 0 | 0 | S |
| 11 | 0 | 0 | 0 | S | 11 | 0 | 0 | 1 | S | 11 | 0 | 0 | 0 | S |
| 12 | 0 | 0 | 0 | S | 12 | 0 | 0 | 0 | S | 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 0 | S | 13 | 0 | 0 | 1 | S | 13 | 0 | 0 | 0 | S |
|    |   |   |   | 2 |    |   |   |   | 2 |    |   |   |   | 2 |

|    | H | I | D |   |    | H | I | A |   |
|----|---|---|---|---|----|---|---|---|---|
| 1  | 0 | 0 | 0 | S | 1  | 0 | 0 | 1 | S |
| 2  | 0 | 0 | 1 | S | 2  | 0 | 0 | 1 | S |
| 3  | 0 | 0 | 1 | S | 3  | 0 | 0 | 1 | S |
| 4  | 1 | 1 | 0 | S | 4  | 1 | 1 | 0 | S |
| 5  | 0 | 0 | 1 | S | 5  | 0 | 0 | 0 | S |
| 6  | 1 | 1 | 0 | S | 6  | 1 | 1 | 0 | S |
| 7  | 0 | 1 | 1 | S | 7  | 0 | 1 | 1 | S |
| 8  | 1 | 1 | 0 | S | 8  | 1 | 1 | 0 | S |
| 9  | 1 | 1 | 1 | P | 9  | 1 | 1 | 0 | S |
| 10 | 0 | 0 | 1 | S | 10 | 0 | 0 | 0 | S |
| 11 | 0 | 0 | 1 | S | 11 | 0 | 0 | 1 | S |
| 12 | 0 | 0 | 0 | S | 12 | 0 | 0 | 1 | S |
| 13 | 0 | 0 | 1 | S | 13 | 0 | 0 | 1 | S |
|    |   |   |   | 1 |    |   |   |   | 0 |

## Hasil Iterasi Ke 3

|    | A | D | G |   |
|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S |
| 2  | 1 | 1 | 0 | S |
| 3  | 1 | 1 | 1 | P |
| 4  | 0 | 0 | 0 | S |
| 5  | 0 | 1 | 0 | S |
| 6  | 0 | 0 | 0 | S |
| 7  | 1 | 1 | 0 | S |
| 8  | 0 | 0 | 0 | S |
| 9  | 0 | 1 | 0 | S |
| 10 | 0 | 1 | 1 | S |
| 11 | 1 | 1 | 1 | P |
| 12 | 1 | 0 | 0 | S |
| 13 | 1 | 1 | 0 | S |
|    |   |   |   | 2 |

|    | C | I | J |   |
|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S |
| 2  | 0 | 0 | 0 | S |
| 3  | 0 | 0 | 0 | S |
| 4  | 1 | 1 | 0 | S |
| 5  | 1 | 0 | 1 | S |
| 6  | 1 | 1 | 0 | S |
| 7  | 1 | 1 | 0 | S |
| 8  | 1 | 1 | 1 | P |
| 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 0 | S |
| 11 | 0 | 0 | 0 | S |
| 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 0 | S |
|    |   |   |   | 2 |

|    | C | I | D |   |
|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S |
| 2  | 0 | 0 | 1 | S |
| 3  | 0 | 0 | 1 | S |
| 4  | 1 | 1 | 0 | S |
| 5  | 1 | 0 | 1 | S |
| 6  | 1 | 1 | 0 | S |
| 7  | 1 | 1 | 1 | P |
| 8  | 1 | 1 | 0 | S |
| 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 1 | S |
| 11 | 0 | 0 | 1 | S |
| 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 1 | S |
|    |   |   |   | 2 |

|    | C | J | D |   |
|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S |
| 2  | 0 | 0 | 1 | S |
| 3  | 0 | 0 | 1 | S |
| 4  | 1 | 0 | 0 | S |
| 5  | 1 | 1 | 1 | P |
| 6  | 1 | 0 | 0 | S |
| 7  | 1 | 0 | 1 | S |
| 8  | 1 | 1 | 0 | S |
| 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 1 | S |
| 11 | 0 | 0 | 1 | S |
| 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 1 | S |
|    |   |   |   | 2 |

|    | H | I | J |   |
|----|---|---|---|---|
| 1  | 0 | 0 | 0 | S |
| 2  | 0 | 0 | 0 | S |
| 3  | 0 | 0 | 0 | S |
| 4  | 1 | 1 | 0 | S |
| 5  | 0 | 0 | 1 | S |
| 6  | 1 | 1 | 0 | S |
| 7  | 0 | 1 | 0 | S |
| 8  | 1 | 1 | 1 | P |
| 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 0 | S |
| 11 | 0 | 0 | 0 | S |
| 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 0 | S |
|    |   |   |   | 2 |

|    | C | I | H |   |
|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S |
| 2  | 0 | 0 | 0 | S |
| 3  | 0 | 0 | 0 | S |
| 4  | 1 | 1 | 1 | S |
| 5  | 1 | 0 | 0 | S |
| 6  | 1 | 1 | 1 | S |
| 7  | 1 | 1 | 0 | S |
| 8  | 1 | 1 | 1 | P |
| 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 0 | S |
| 11 | 0 | 0 | 0 | S |
| 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 0 | S |
|    |   |   |   | 2 |

|    | C | H | J |   |
|----|---|---|---|---|
| 1  | 1 | 0 | 0 | S |
| 2  | 0 | 0 | 0 | S |
| 3  | 0 | 0 | 0 | S |
| 4  | 1 | 1 | 0 | S |
| 5  | 1 | 0 | 1 | S |
| 6  | 1 | 1 | 0 | S |
| 7  | 1 | 0 | 0 | S |
| 8  | 1 | 1 | 1 | P |
| 9  | 1 | 1 | 1 | P |
| 10 | 0 | 0 | 0 | S |
| 11 | 0 | 0 | 0 | S |
| 12 | 0 | 0 | 0 | S |
| 13 | 0 | 0 | 0 | S |
|    |   |   |   | 2 |

Rule Asosiasi :

| Aturan Asosiatif | Confidence         |
|------------------|--------------------|
| $\{A,D\},=G$     | $2/5=*100\%=40\%$  |
| $\{A,G\},=D$     | $2/2=*100\%=100\%$ |
| $\{G,D\},=A$     | $2/3=*100\%=66\%$  |
| $A=\{G,D\}$      | $2/7=*100\%=28\%$  |
| $D=\{G,A\}$      | $2/7=*100\%=28\%$  |
| $G=\{A,D\}$      | $2/3=*100\%=66\%$  |
| $\{C,I\},=J$     | $2/5=*100\%=40\%$  |
| $\{J,I\},=C$     | $2/2=*100\%=100\%$ |
| $\{C,J\},=I$     | $2/3=*100\%=66\%$  |
| $C=\{J,I\}$      | $2/7=*100\%=28\%$  |
| $J=\{C,I\}$      | $2/3=*100\%=66\%$  |
| $I=\{C,I\}$      | $2/5=*100\%=40\%$  |
| $\{C,I\},=D$     | $2/5=*100\%=40\%$  |
| $\{C,D\},=I$     | $2/2=*100\%=100\%$ |
| $\{D,I\},=C$     | $2/2=*100\%=100\%$ |
| $I=\{C,D\}$      | $2/5=*100\%=40\%$  |
| $C=\{D,I\}$      | $2/7=*100\%=28\%$  |
| $D=\{C,I\}$      | $2/7=*100\%=28\%$  |
| $\{C,J\},=D$     | $2/3=*100\%=66\%$  |
| $\{D,J\},=C$     | $2/2=*100\%=100\%$ |
| $\{C,D\},=J$     | $2/2=*100\%=100\%$ |
| $C=\{D,I\}$      | $2/7=*100\%=28\%$  |
| $D=\{C,J\}$      | $2/7=*100\%=28\%$  |
| $J=\{C,D\}$      | $2/3=*100\%=66\%$  |
| $\{H,I\},=J$     | $2/3=*100\%=66\%$  |
| $\{J,I\},=H$     | $2/2=*100\%=100\%$ |
| $\{H,J\},=I$     | $2/2=*100\%=100\%$ |
| $H=\{I,J\}$      | $2/4=*100\%=50\%$  |
| $I=\{H,J\}$      | $2/5=*100\%=40\%$  |
| $J=\{I,J\}$      | $2/3=*100\%=66\%$  |
| $\{C,H\},=I$     | $2/2=*100\%=100\%$ |
| $\{C,I\},=H$     | $2/5=*100\%=40\%$  |
| $\{I,H\},=C$     | $2/3=*100\%=66\%$  |
| C                | $2/7=*100\%=28\%$  |
| H                | $2/4=*100\%=50\%$  |
| I                | $2/5=*100\%=40\%$  |
| $\{C,H\},=J$     | $2/2=*100\%=100\%$ |
| $\{J,H\},=C$     | $2/2=*100\%=100\%$ |
| $\{C,J\},=H$     | $2/3=*100\%=66\%$  |
| C                | $2/7=*100\%=28\%$  |
| H                | $2/4=*100\%=50\%$  |

|   |                                   |
|---|-----------------------------------|
| J | $\frac{2}{3} \times 100\% = 66\%$ |
|---|-----------------------------------|