2406011813011O

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1. $W_{1,3} \lor W_{2,2}$: ada wumpus diposisi [1,3] atau [2,2]

   $R_1 = S_{1,2}$

   $R_2 : \neg B_{1,2}$

   Aturan Permainan

   $R_3 : S_{2,1} \iff W_{2,2} \lor W_{3,1}$

   Biconditional elimination Pada R3

   $R_4 = (S_{2,1} \implies W_{2,2} \lor W_{3,1}) \land (W_{2,2} \lor W_{3,1} \implies S_{2,1})$

   And elimination pada R4

   $R_5 : S_{2,1} \implies W_{2,2} \lor W_{3,1}$

   Modus Ponen R5 dan R_1

   $$\frac{S_{2,1} \implies W_{2,2} \lor W_{3,1}}{\underline{S_{2,1}}}$$

   $R_6 : W_{2,2} \lor W_{3,1}$

   $R_7 : B_{2,1} \iff P_{3,1} \lor P_{2,2}$

   Biconditional elimination

   $R_8 = (B_{2,1} \iff P_{3,1} \lor P_{2,2}) \land (\neg P_{3,1} \lor P_{2,2} \implies B_{2,1})$

   And elimination R8

   $R_9 : P_{3,1} \lor P_{2,2} \implies B_{2,1}$

   · Logical equivalent Contrapositive R9

   $R_{10} : \neg B_{2,1} = \neg (P_{3,1} \lor P_{2,2})$

   Modus Ponen R_{10} dan R_2

   $$\frac{\neg B_{2,1} \implies \neg (P_{3,1} \lor P_{2,2})}{\underline{\neg B_{2,1}}}$$

   $R_{11} : \neg (P_{3,1} \lor P_{2,2})$

   Aturan Demorgan R_{11}

   $R_{12} : \neg P_{3,1} \land \neg P_{2,2}$

   And elimination R_{12}

   $R_{13} = \neg P_{3,1}$

   $R_{14} : \neg P_{2,2}$

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2a. 601, 604, 605, 606
   Pertama R_1 = IF 601 THEN 608 databaru 608
            R_3 = IF 609 THEN 610 databaru 610
            R_4 = IF 605 AND 606 THEN 611 databaru 611
            R_6 = IF 608 AND 611 THEN 613 databaru 613
            R_8 = IF 610 AND THEN 615 databaru 615
            R_9 = IF 613 AND 615 THEN X

   Maka Penyakitnya adalah penyakit X

2b. IF suhu badan > 37°C AND Sakit tenggorokan THEN Positif Covid-19 (CF=0,6)
    IF Rapid Test : Positif THEN Positif Covid-19 (CF=0,8)
    38°C   CF=0,9
    Sakit Tenggorokan   CF : 0,8
    Positif   CF : 0,8
    CF_1 = min(0,9, 0,8) × 0,6 = 0,48
    CF_2 = 0,8 × 0,8 = 0,64
        $CF_1 + CF_2 (1 - CF_1)$
        $0,48 + 0,64 (1 - 0,48)$
        $0,48 + 0,3328 = 0,8128$

3a.

Current State:
ONTABLE (A) ∧ ON (C,A) ∧ ONTABLE (B) ∧ CLEAR (C) ∧ CLEAR (B) ∧ ARMEMPTY

Stack
ON TABLE (C)
ON (B,A)
ONTABLE (C) ∧ ONTABLE (A) ∧ ON (B,A) ∧ CLEAR (B) ∧ CLEAR (C) ∧ ARMEMPTY

b.

Stack
ON (C,A) ∧ (CLEAR (C) ∧ ARMEMPTY)
UNSTACK (C,Z)
HOLDING (C)
PUTDOWN (C) ~~ONTABLE(C)~~
ON (B,A)
ONTABLE (C) ∧ ONTABLE (A) ∧ ON (B,A) ∧ CLEAR (B) ∧ CLEAR (C) ∧ ARMEMPTY

Current State
| ONTABLE (A) ∧ ONTABLE (B) ∧ CLEAR (A) ∧ CLEAR (B) ∧ HOLDING (C) |

1.2 Nilai Sikap 70 nilai Prestasi = 80

Sikap buruk $\dfrac{90-70}{50} = 0,4$

Sikap Baik $\dfrac{70-40}{50} = 0,6$

Prestasi Tinggi $\dfrac{86-30}{70} = 0,8$

Prestasi Rendah $\dfrac{100-86}{70} = 0,2$

b. R_1 min $(0,4 , 0,2) = 0,2$

0,2   Dikurang

R_2 min $(0,4 , 0,8) = 0,4$

0,4   Dikurang

R_3 min $(0,6 , 0,2) = 0,2$

0,2   Ditambah

R_4 min $(0,8 , 0,6) = 0,6$

0,6   Ditambah

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S2. $X_0 = 1$ 0 ——————— w_1
    X_1 0 ——————— w_2 ——————→ ○ out
    X_2 0 ——————— w_3
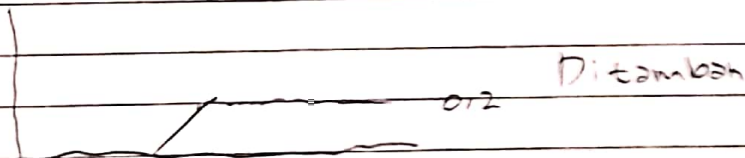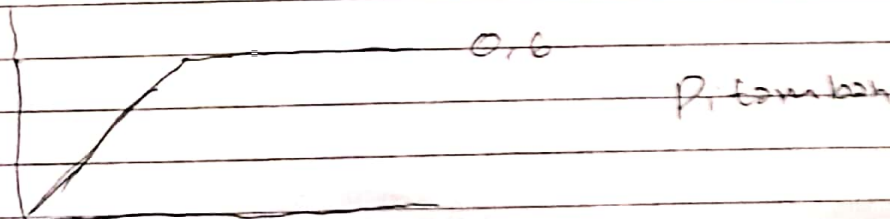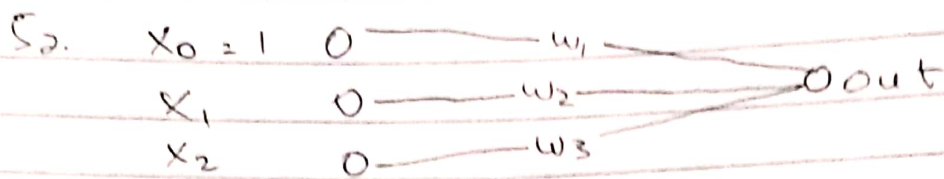
b. $w_1 = 0$ $w_2 = 0$ $w_3 = 0$ $R = 0,2$
   $X_0 = 1$ $X_1 = 0$ $X_2 = 0$ $t = 0$
   Out $= \text{Sign}((0 \times 1) + (0 \times 0) + (0 \times 0)) = 1$
   $w_0 = 0 + 0,2(0-1)1 = -0,2$
   $w_1 = 0 + 0,2(0-1)0 = 0$
   $w_2 = 0 + 0,2(0-1)0 = 0$

c. $w_1 x_1 + w_2 x_2 + w_0 = 0$
   $0 + 0 + (-0,2) = 0$
   $(-0,2) = 0$
   tidak bisa / bukan persamaan garis