1. AOC

Wij = Wij-1 + Pj + Qj

Cii = 0

Rii = 0

Wii = Qi

Cij = min(Cia-1 + Caj) + Wij

I < a <= j

p[i] = {0.15, 0.10, 0.05, 0.10, 0.20}

q[i] = {0.05, 0.10, 0.05, 0.05, 0.05, 0.10}

W00 = Q0 = 0.05

W11 = Q1 = 0.10

W22 = Q2 = 0.05

W33 = Q3 = 0.05

W44 = Q4 = 0.05

W55 = Q5 = 0.10

W01 = W00 + P1 + Q1 = 0.30

W12 = W11 + P2 + Q2 = 0.25

W23 = W22 + P3 + Q3 = 0.15

W34 = W33 + P4 + Q4 = 0.20

W45 = W44 + P5 + Q5 = 0.35

W02 = W01 + P2 + Q2 = 0.45

W13 = W12 + P3 + Q3 = 0.35

W24 = W23 + P4 + Q4 = 0.30

W35 = W34 + P5 + Q5 = 0.50

W03 = W02 + P3 + Q3 = 0.55

W14 = W13 + P4 + Q4 = 0.50

W25 = W24 + P5 + Q5 = 0.60

W04 = W03 + P4 + Q4 = 0.70

W15 = W14 + P5 + Q5 = 0.80

W05 = W04 + P5 + Q5 = 1

C00 = C11 = C22 = C33 = C44 = C55 = 0

C01 = min(C00, C11) + W01 = W01 = 0.30

C12 = W12 = 0.25

C23 = W23 = 0.15

C34 = W34 = 0.20

C45 = W45 = 0.35

C02 = min(C01, C12) + W02 = 0.70 (C12)

C13 = min(C12, C23) + W13 = 0.50 (C23)

C24 = min(C23, C34) + W24 = 0.45 (C23)

C35 = min(C34, C45) + W35 = 0.70 (C34)

C03 = min(C00 + C13, C01 + C23, C02 + C33) + W03 = 1 (C01 + C23)

C14 = min(C11 + C24, C12 + C34, C13 + C44) + W14 = 0.95 (C11 + C24 / C12 + C34)

C25 = min(C22 + C35, C23 + C45, C24 + C55) + W25 = 1.05 (C24 + C55)

C04 = min(C00 + C14, C01 + C24, C02 + C34, C03 + C44) + W04 = 1.45 (C01 + C24)

C15 = min(C11 + C25, C12 + C35, C13 + C45, C14 + C55) + W15 = 1.65 (C13 + C45)

C05 = min(C00 + C15, C01 + C25, C02 + C35, C03 + C45, C04 + C55) + W05 = 2.35 (C01 + C25 / C03 + C45)

1. K-garduri

Formula de recurenta :

D[i] = D[i-1] + D[i-k]

n = 5, k = 2

Cazuri de baza:

D[0] = 0

D[1] = 1

D[2] = 2

D[3] = D[2] + D[1] = 3

D[4] = D[3] + D[2] = 5

D[5] = D[4] + D[3] = 8

Reprezentare grafica:

D[1] -> |

D[2] -> || sau =

D[3] -> ||| sau |= sau =|

D[4] -> |||| sau ||= sau |=| sau =|| sau ==

D[5] -> ||||| sau |||= sau ||=| sau |=|| sau =||| sau |== sau =|= sau ==|

1. 3-Sume

v = {3, 4, 2, 1}

Cazuri de baza:

D[-1][0] = 0

D[-1][1] = 0

D[-1][2] = 0

v[0] = 3 % 3 == 0 -> D[0][0] = 1 + D[-1][0] = 1 -> {3}

D[0][1] = 2 \* D[-1][0] = 0 -> {}

D[0][2] = 2 \* D[-1][0] = 0 -> {}

v[1] = 4 % 3 == 1 -> D[1][0] = D[0][0] + D[0][2] = 1 + 0 = 1 – {3}

D[1][1] = 1 + D[0][0] + D[0][1] = 1 + 1 + 0 = 2 – {{3, 4}, {4}}

D[1][2] = D[0][2] + D[0][1] = 0 – {}

v[2] = 2 % 3 == 2 -> D[2][0] = D[1][0] + D[1][1] = 1 + 2 = 3 – {{3}, {4, 2}, {3, 4, 2}}

D[2][1] = D[1][2] + D[1][1] = 0 + 2 = 2 – {{3, 4}, {4}}

D[2][2] = 1 + D[1][2] + D[1][0] = 1 + 0 + 1 = 2 – {{3, 2}, {2}}

v[3] = 1 % 3 == 1 -> D[3][0] = D[2][0] + D[2][2] = 3 + 2 = 5 - {{3}, {4, 2}, {3, 4, 2}, {3, 2, 1}, {2, 1}}

D[3][1] = 1 + D[2][0] + D[2][1] = 1 + 3 + 2 = 6 - {{4}, {3, 4}, {1}, {3, 1}, {4, 2, 1}, {3, 4, 2, 1}}

D[3][2] = D[2][2] + D[2][1] = 2 + 2 = 4 – {{2}, {3, 2}, {4, 1}, {3, 4, 1}}