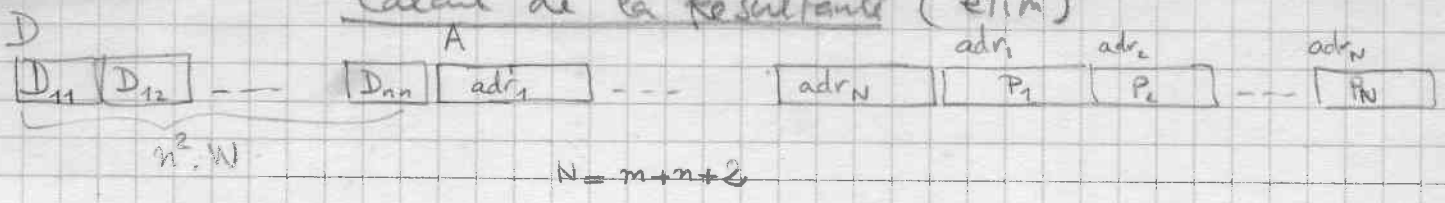
Calcul de la Résultante (elim)



D
A
n

A0 = libre pointe D

A1 = A0 + 2n² pointe A
orig = A1

A6 = A0 + 4(m+n) pointe P_1

q = 0

i = n, 0

pour W = coef(P, x^i)

W = 0 ? oui → (A0)+ = 0

non ↓

q = q + 1

A(q)+ = adr(W)

(A0)+ = q

i = 0, m

j = 0, m

(A1)+ = 0

A2 = orig

i = 0, n

(A1)+ = (A2)+

doublable m ↔ n

$P(z) = a_0 z^n + a_1 z^{n-1} + \dots + a_n$

$Q(z) = z - \alpha$

$$\begin{vmatrix} a_0 & a_1 & a_2 & & & 1 \\ 1 & -\alpha & & & & a_n \\ & 1 & -\alpha & & & \\ & & & & & \\ & & & & 1-\alpha & \end{vmatrix}$$

$Q(z) = z^2 + pz + q$

$$\begin{vmatrix} a_0 & a_1 & & & z & 1 \\ 0 & a_0 & & & a_n & 0 \\ 1 & p & q & & a_{n-1} & a_n \\ & 1 & p & q & & \\ & & 1 & p & q & \\ & & & & & \\ & & & & 1\ p\ q & \end{vmatrix}$$

Résultante de P et Q :

$P(z) = a_0 z^n + a_1 z^{n-1} + \dots + a_n$

$Q(z) = b_0 z^m + b_1 z^{m-1} + \dots + a_m$

$$\begin{vmatrix} a_0 & a_1 & \dots & a_n & 0 & 0 \\ 0 & a_0 & \dots & a_n & 0 & \\ \dots & & & & & \\ 0 & 0 & a_0 & \dots & & a_n \\ b_0 & b_1 & \dots & b_m & 0 & 0 \\ 0 & b_0 & \dots & b_m & & \\ & & & & & \\ & & & b_0 & \dots & b_m \end{vmatrix} \quad \left.\begin{matrix} \\ \\ \\ \\ \\ \\ \\ \\ \end{matrix}\right\} \begin{matrix} m \text{ lignes} \\ \\ \\ \\ n \text{ lignes} \\ \\ \\ \\ \end{matrix}$$