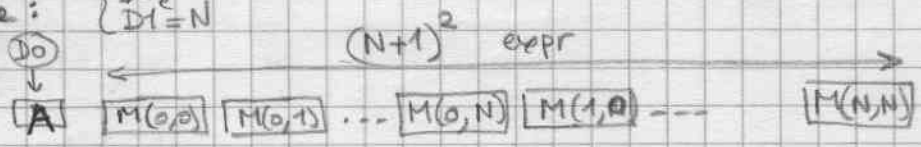


5 sur la pile: $\{ \begin{matrix} Do \\ D1=N \end{matrix} \}$



Calcule le determinant, mis en toppile (de numéros Do-1)

```

XDET: MOVEQ #1, D2      signe = 1
      ATQ #1, D2
      MOVEM Do/D1/D2, -(SP)
      ADDQ #1, (SP)
      MOVE Do, -(SP)
      BSR PUSHNU      } ①
      MOVE (SP), Do   } A = 1
      BSR WASGNR
  
```

2	A
4	M(0,0)
6	N
8	Signe

```

MG87: MOVE 4(SP), Do      N
  
```

```

X BNE MG88
  fin: prende M(N,N) * signe
      MOVE 6(SP), Do
      BSR LB303
      MOVE (SP)+, Do
      BSR WASGNR
      ADDQ #6, SP
      BRA XIMUL
  
```

signe
A = signe

```

MG88: MOVEQ #0, D1      ← MOVE 2(SP), Do recherche du pivot
  
```

```

MG89: MOVEM Do/D1, -(SP)
  
```

```


MOVE 6(SP), D1
ADDQ #1, D1
MULU D1, Do
ADD 4(SP), Do
ADDQ #1, Do
  
  
```

$M(i,0) = 0$?
BSR WHCOND calcule conditions
MOVE (SP), Do

M(i,0)

```

BSR XHFLOB XHZERO
BNE MG92 → ≠ 0
  
```

```

CMP #4000, (A0) ②
BNE MG92 → ≠ 0
  
```

signe = -signe

```

MOVEM (SP)+, Do/D1 ← MOVE 4(SP), D4 ③
  
```

```

ADDQ #1, D1
CMP D4, D1 ④
BLE MG89
  
```

↓ det = 0

2	M(0,0)
4	A
6	M(0,0)
8	N
10	Signe

```

M1: MOVE TVARN, D6
    SUB (SP)+, D6
MG90: BSR POPN
    DBRA D6, MG90
    ADDQ #6, SP
    BRA PUSHNZ

```

de pile jusqu'à A compris

```

MG92: MOVEM (SP)+, D0/D1

```

→ M(i,0)

```

TST D1
BEQ MG94

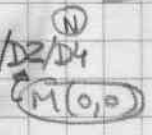
```

pas besoin de pivotage

```

MOVEM (SP), D1/D2/D4

```



échanger

$$M(0,0) \leftrightarrow M(i,0)$$

$$M(0,1) \leftrightarrow M(i,1)$$

$$M(0,N) \leftrightarrow M(i,N)$$

```

MG93: BSR MG79
    ADDQ #1, D0
    ADDQ #1, D2
    DBRA D4, MG93

```

échange D0 D2

```

MG94: MOVEQ #1, D0
    MOVEM (SP), D1/D2/D3
    ADDQ #2, D1
    ADD D3, D1

```



	j
2	M(i,j)
4	M(0,j)
6 p0	i
8 D1	M(i,0)
10 D2	M(0,0)
	①
	M(0,0)
	N
	sign

```

MG95: MOVEM D0/D1/D2, -(SP)
    MOVEQ #1, D0
    ADDQ #1, D1
    ADDQ #1, D2

```

```

MG96: MOVEM D0/D1/D2, -(SP)

```

D1 = M(i,j)

```

MOVE D1, D2
MOVE 10(SP), D0
BSR XHMUL
MOVE 4(SP), D2
BSR LB321

```

$$M(0,0)$$

$$M(i,j) = M(i,j) * M(0,0)$$

} M(0,j) poussé sur la pile

```

MOVE TVARN, D2
MOVE D2, D1
MOVE 8(SP), D0
BSR XHMUL
MOVE TVARN, D1
MOVE 2(SP), D0
MOVE D0, D2
BSR XHSUB

```

$$M(i,0)$$

$$p_0 = M(0,j) * M(i,0)$$

$$M(i,j) = M(i,j) - p_0$$

```

BSR POPN           ôte p0
MOVE 2(SP), D0    M(i,j)
MOVE D0, D2
MOVE 12(SP), D1   A
BSR XHDIVE        M(i,j) =  $\frac{M(i,j)}{A}$ 

```

```

MOVEM (SP)+, D0/D1/D2
ADDQ #1, D0
ADDQ #1, D1
ADDQ #1, D2
CMP 10(SP), D0
BLE MG96

```

```

MOVE 2(SP), D0
BSR POPD0         ôte M(i,0)

```



```

MOVEM (SP)+, D0/D1/D2
ADDQ #1, D0
MOVE 4(SP), D3
ADD D3, D1
CMP D3, D0
BLE MG95

```

```

SUBQ #1, 4(SP)    N=N-1
MOVE 4(SP), D6

```

ôte M(0,t) N fois (vient à ôter M(0,t) -- M(0,N))

```

MG97: MOVE (SP), D0
ADDQ #2, D0
BSR POPD0
DBRA D6, MG97
MOVE (SP), D0
BSR POPD0
BRA MG87

```

} ôte A (vient à faire A = M(0,0) et effacer M(0,0))