Algoritmos e Programação de Computadores

Disciplina 113476

http://www.nickgentry.com/

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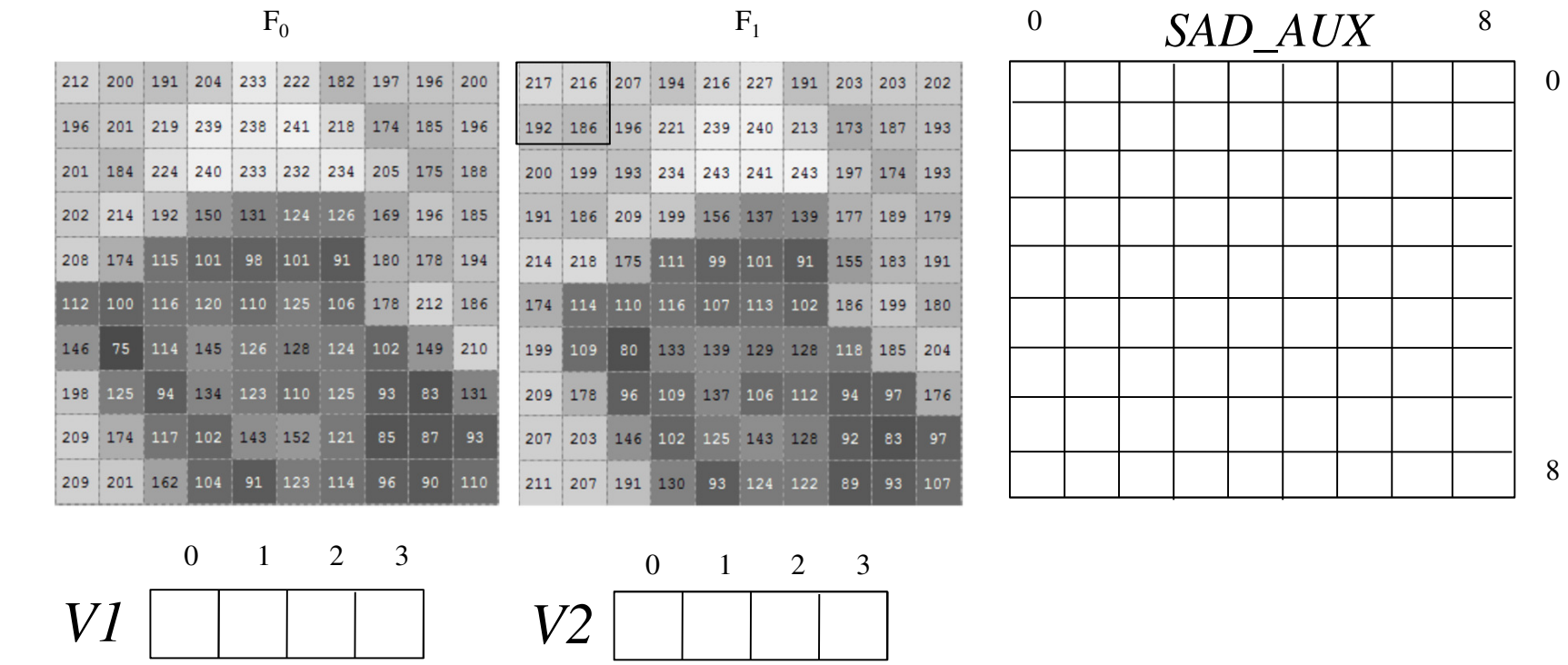
Instituto de Ciências Exatas
Departamento de Ciência da Computação

Prática de Laboratório Extra 01
Full Search Algorithm


The Full Search
Algorithm
"AZ FILM"
A. Zaghetto. Brasília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208 174 115 101 98 101 91 180 178 194
112 100 116 120 110 125 106 178 212 186
146 75 114 145 126 128 124 102 149 210
198 125 94 134 123 110 125 93 83 131
209 174 117 102 143 152 121 85 87 93
209 201 162 104 91 123 114 96 90 110
217 216 207 194 216 227 191 203 203 202
192 186 196 221 239 240 213 173 187 193
200 199 193 234 243 241 243 197 174 193
191 186 209 199 156 137 139 177 189 179
214 218 175 111 99 101 91 155 183 191
174 114 110 116 107 113 102 186 199 180
199 109 80 133 139 129 128 118 185 204
209 178 96 109 137 106 112 94 97 176
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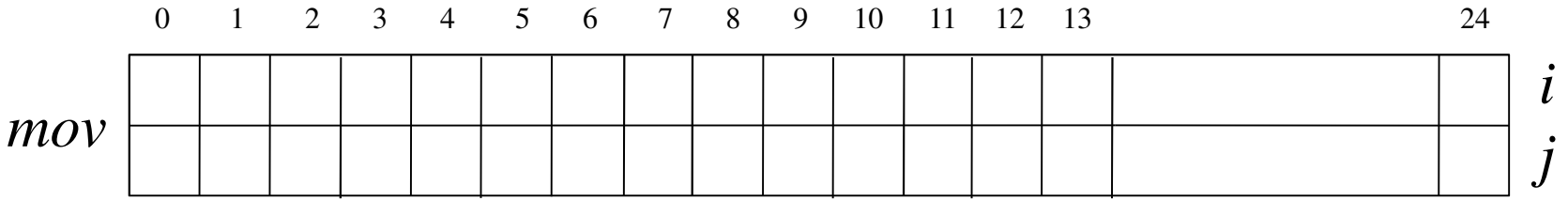
0 1 2 3
V1
0 1 2 3
V2

CALCULA_SAD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mov
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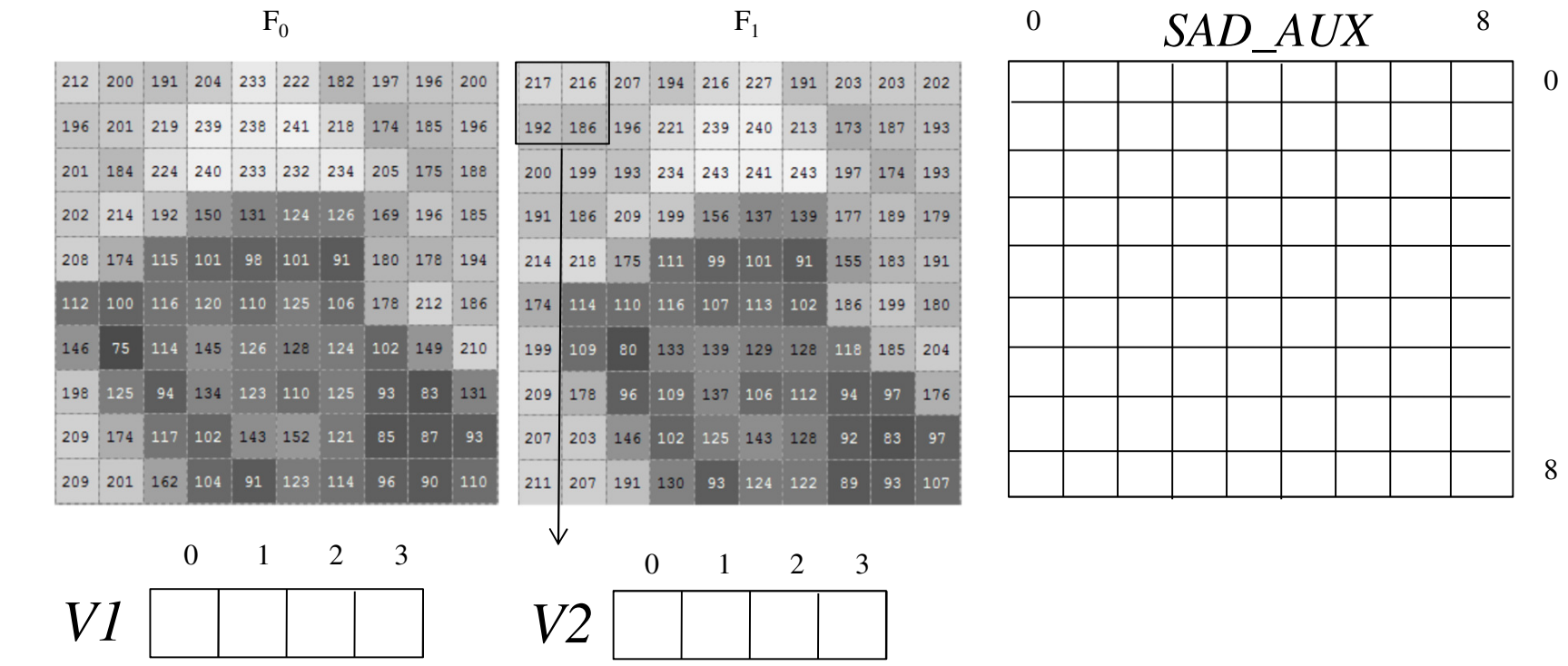
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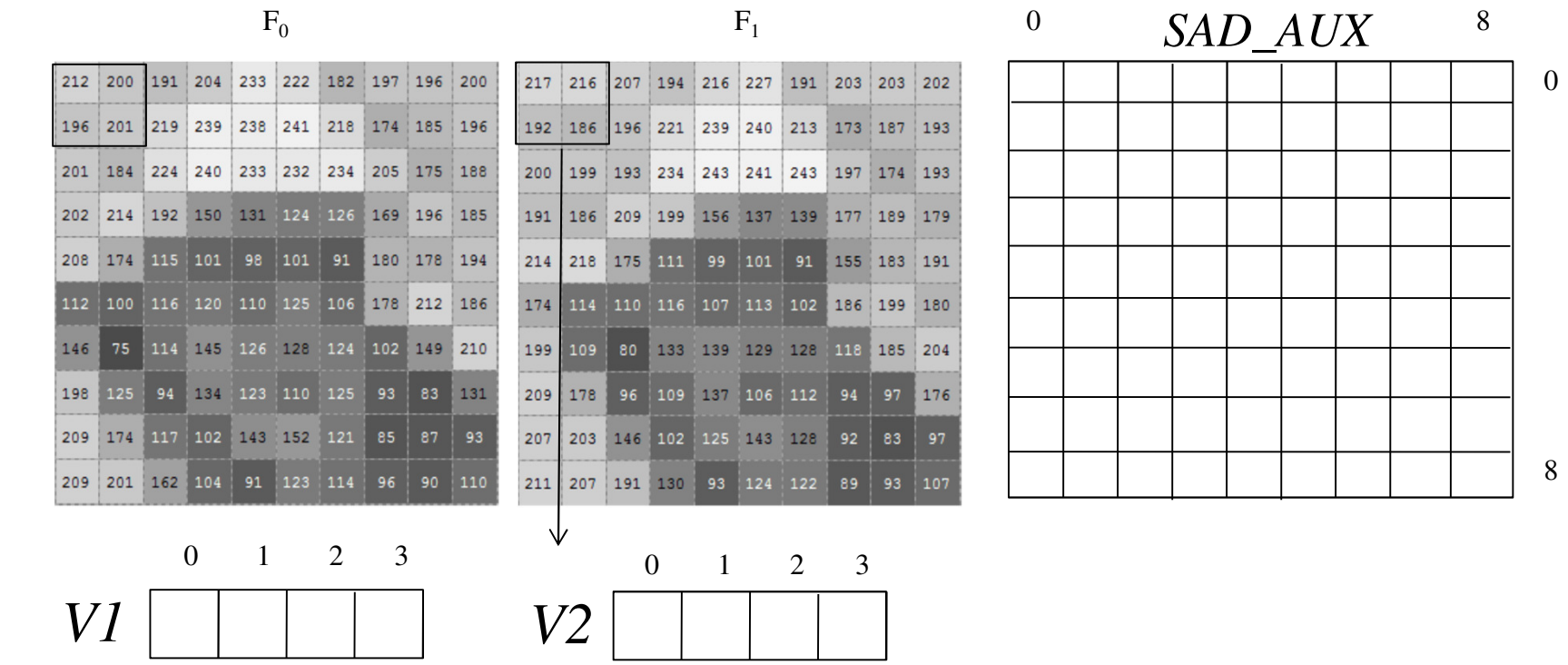
mov
i
j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214 218 175 111 99 101 91 155 183 191
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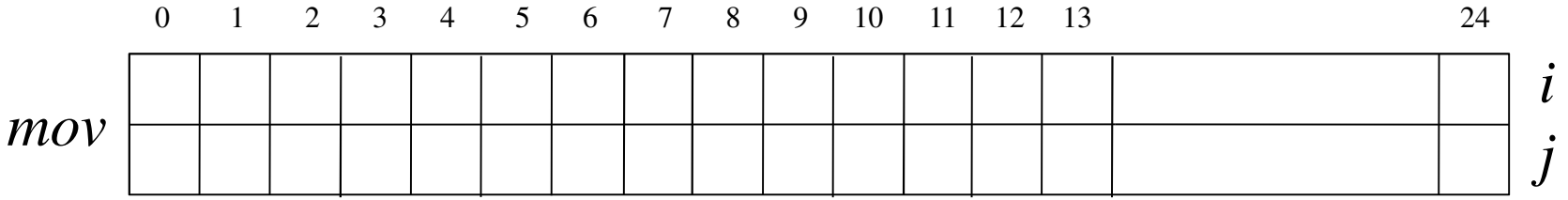
V2

CALCULA_SAD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mov
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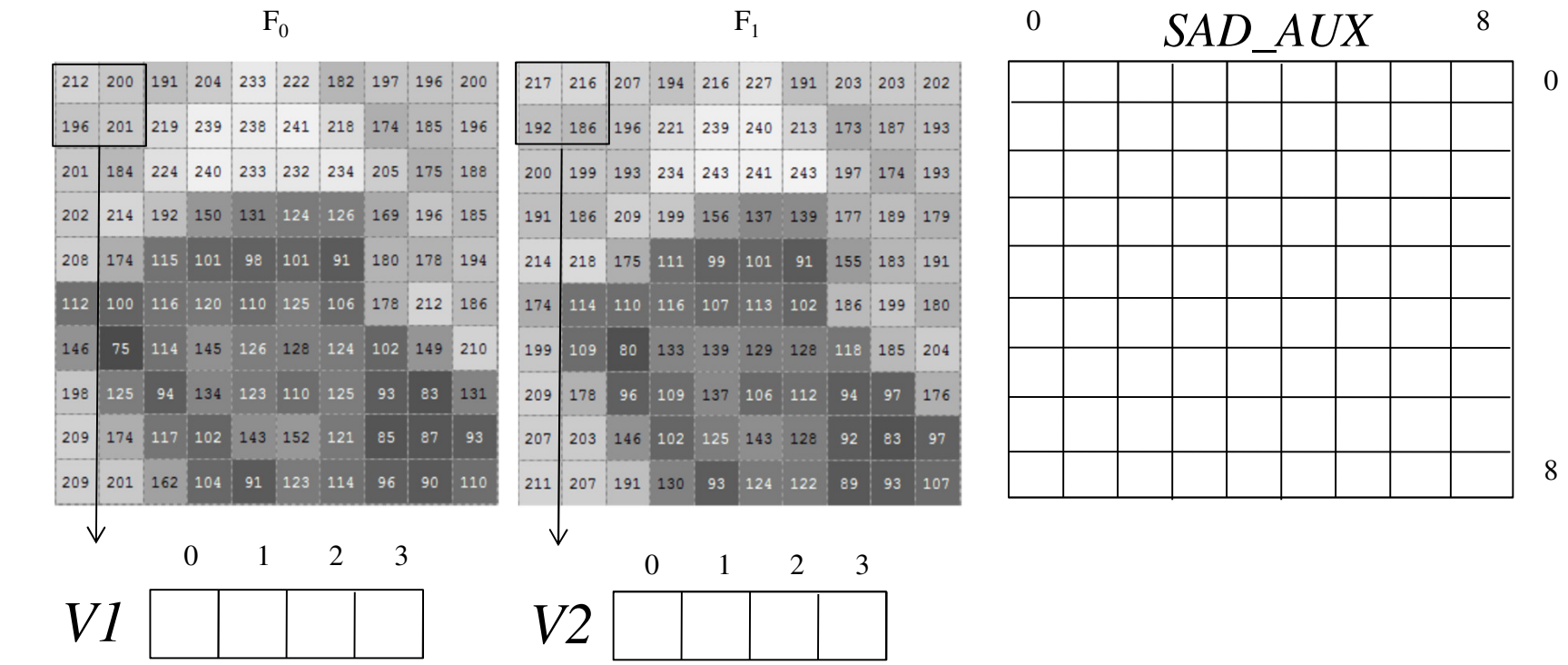
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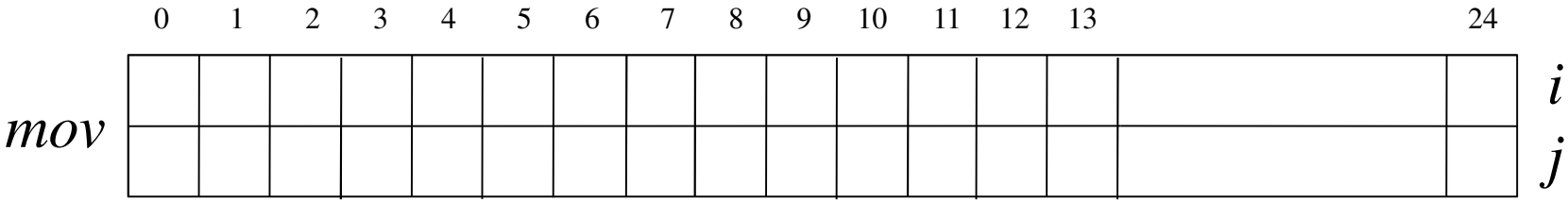
0 1 2 3
V1
0 1 2 3
V2

CALCULA_SAD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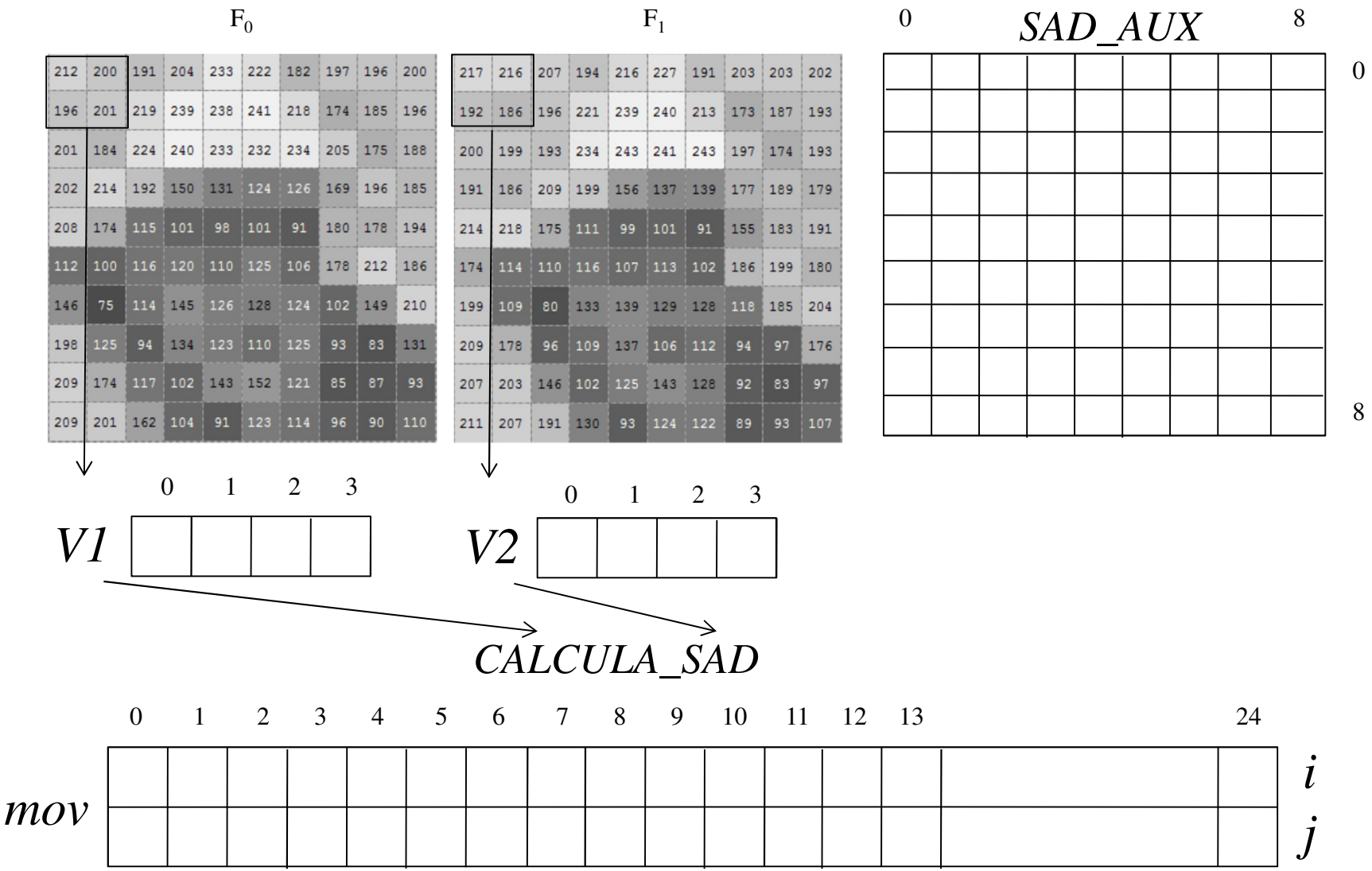
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V1
0 1 2 3
V2
CALCULA_SAD
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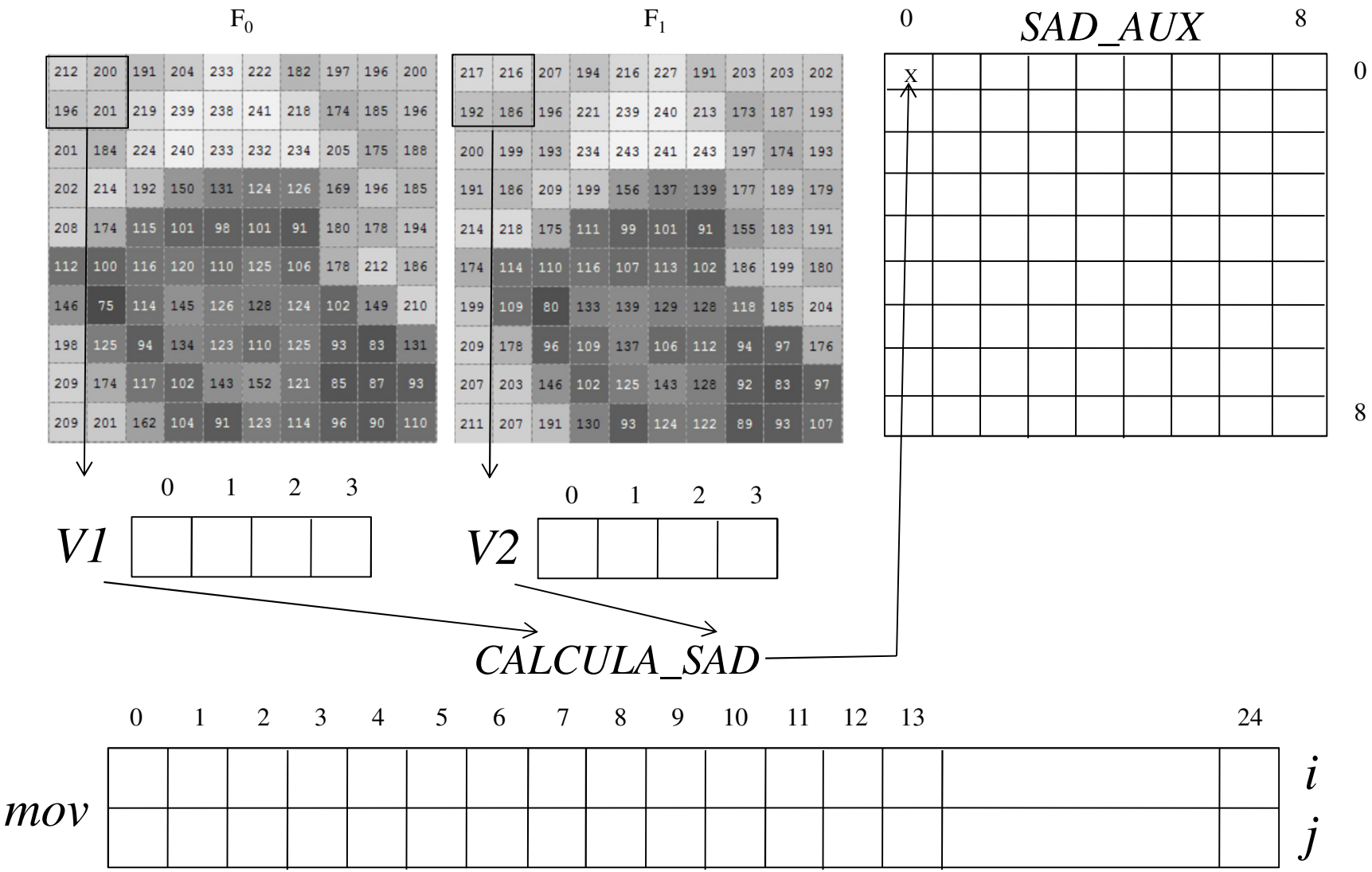
mov
i
j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211 207 191 130 93 124 122 89 93 107
0 1 2 3
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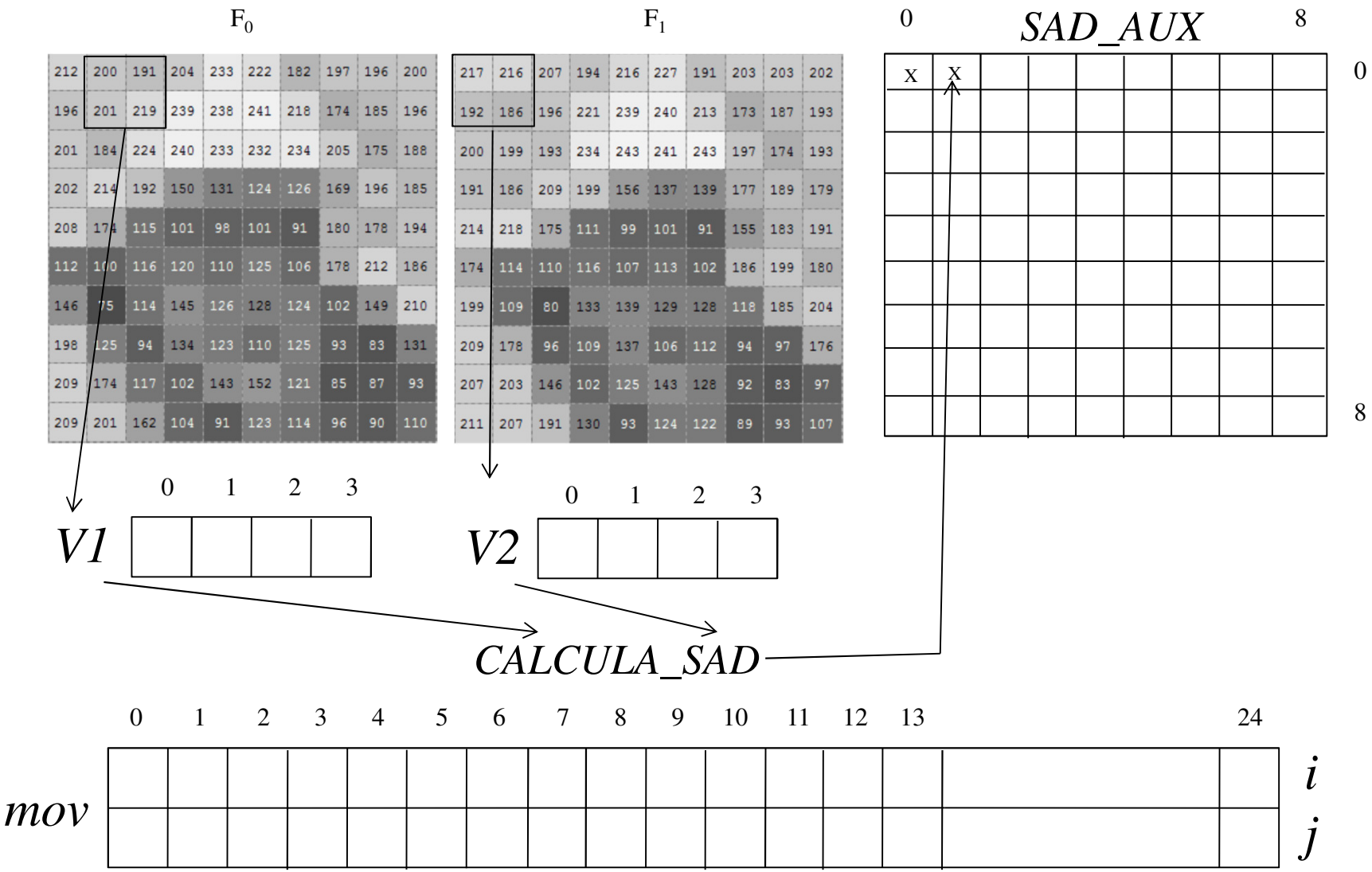
V2
CALCULA_SAD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
i
j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mov
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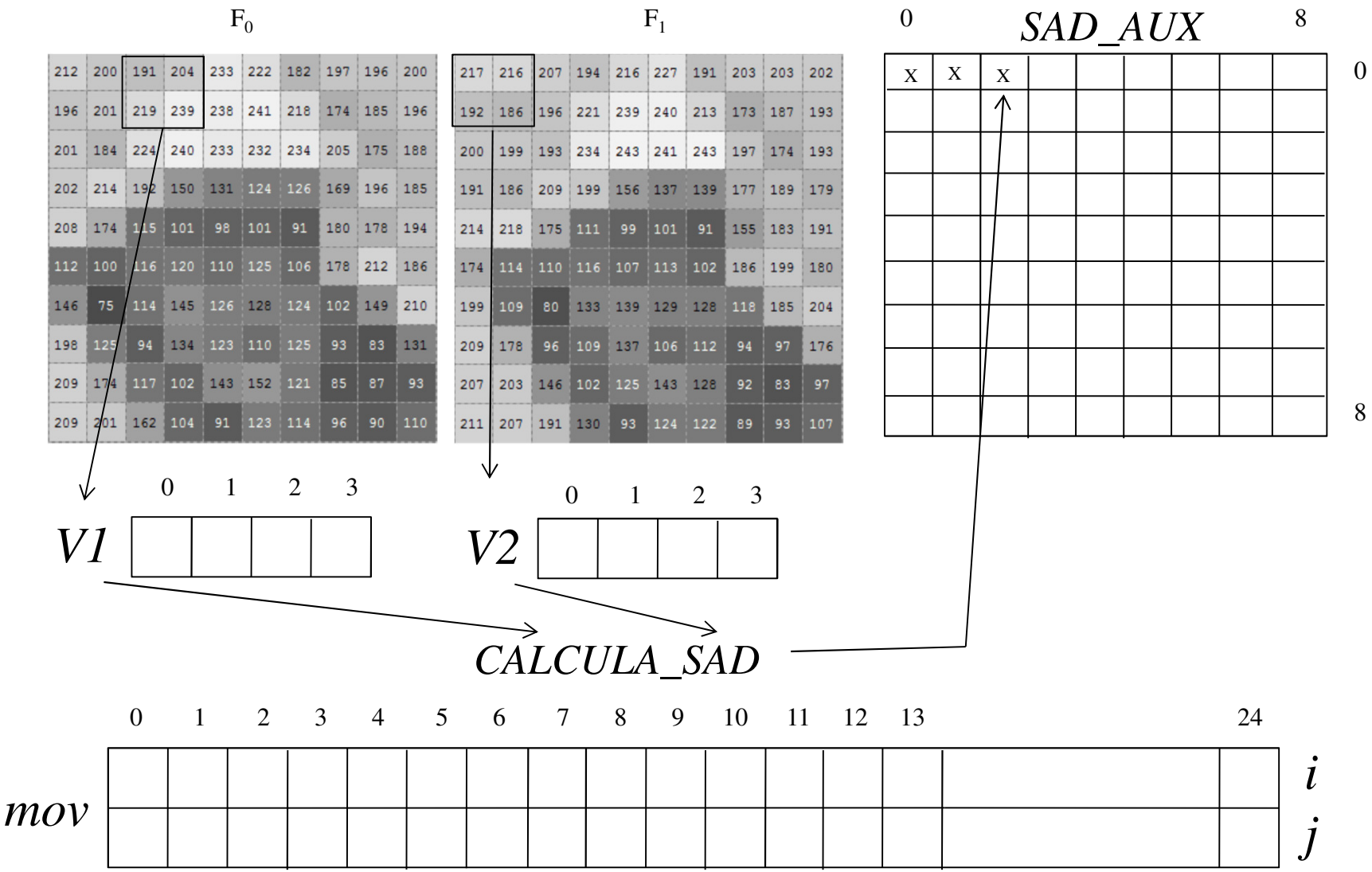
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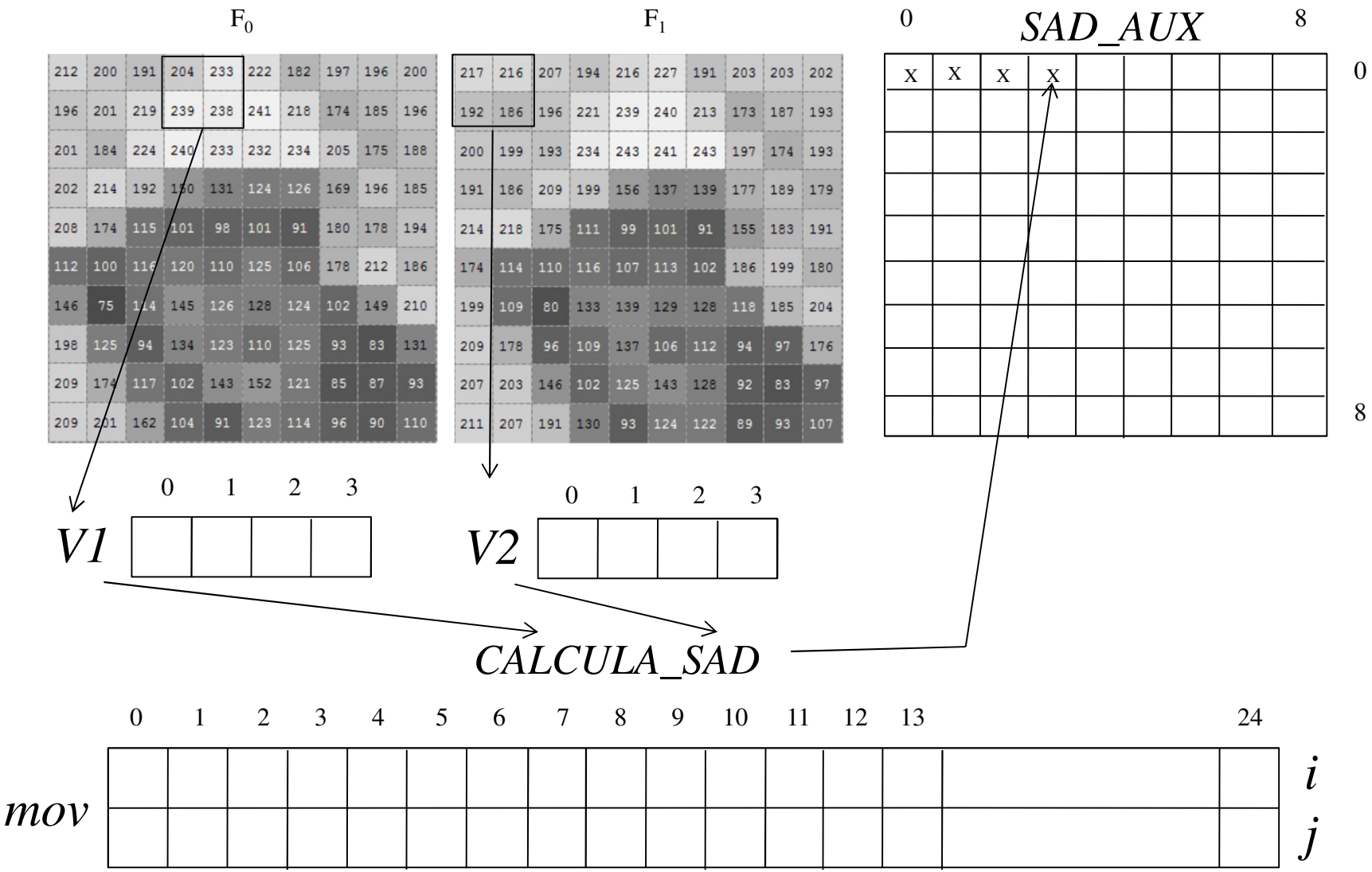
i
j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i
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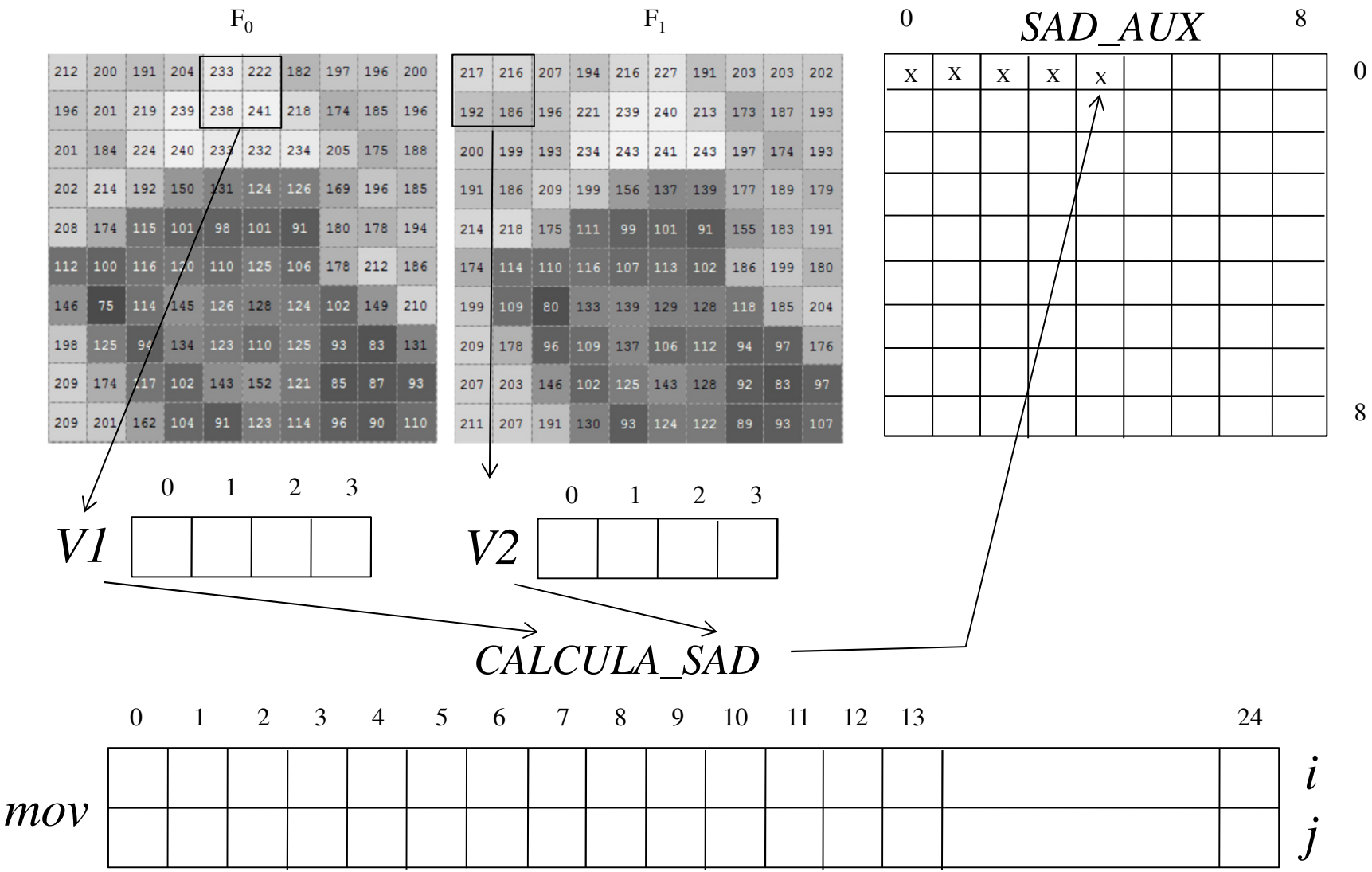
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i
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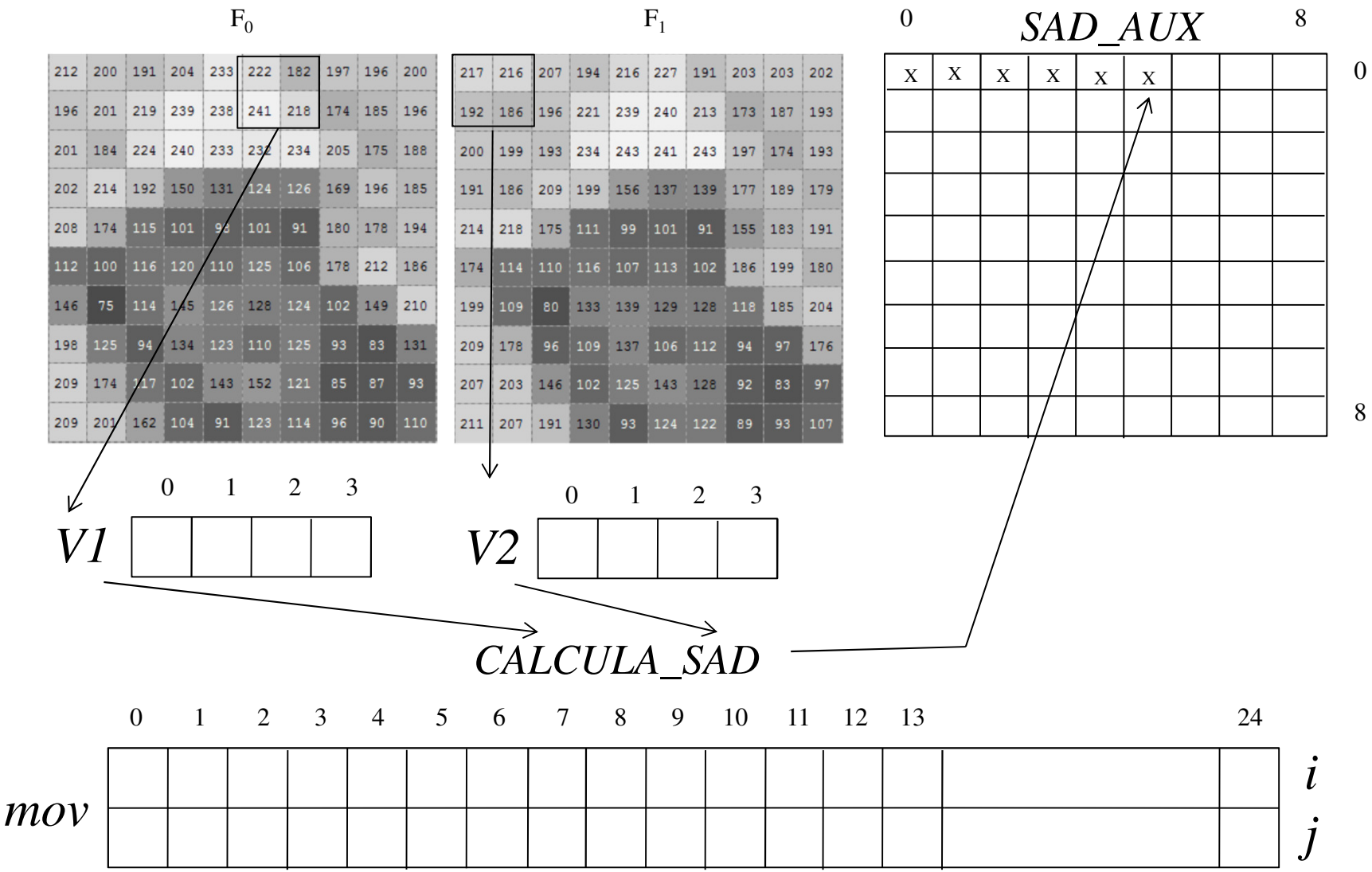
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V2
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CALCULA_SAD
mov
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i
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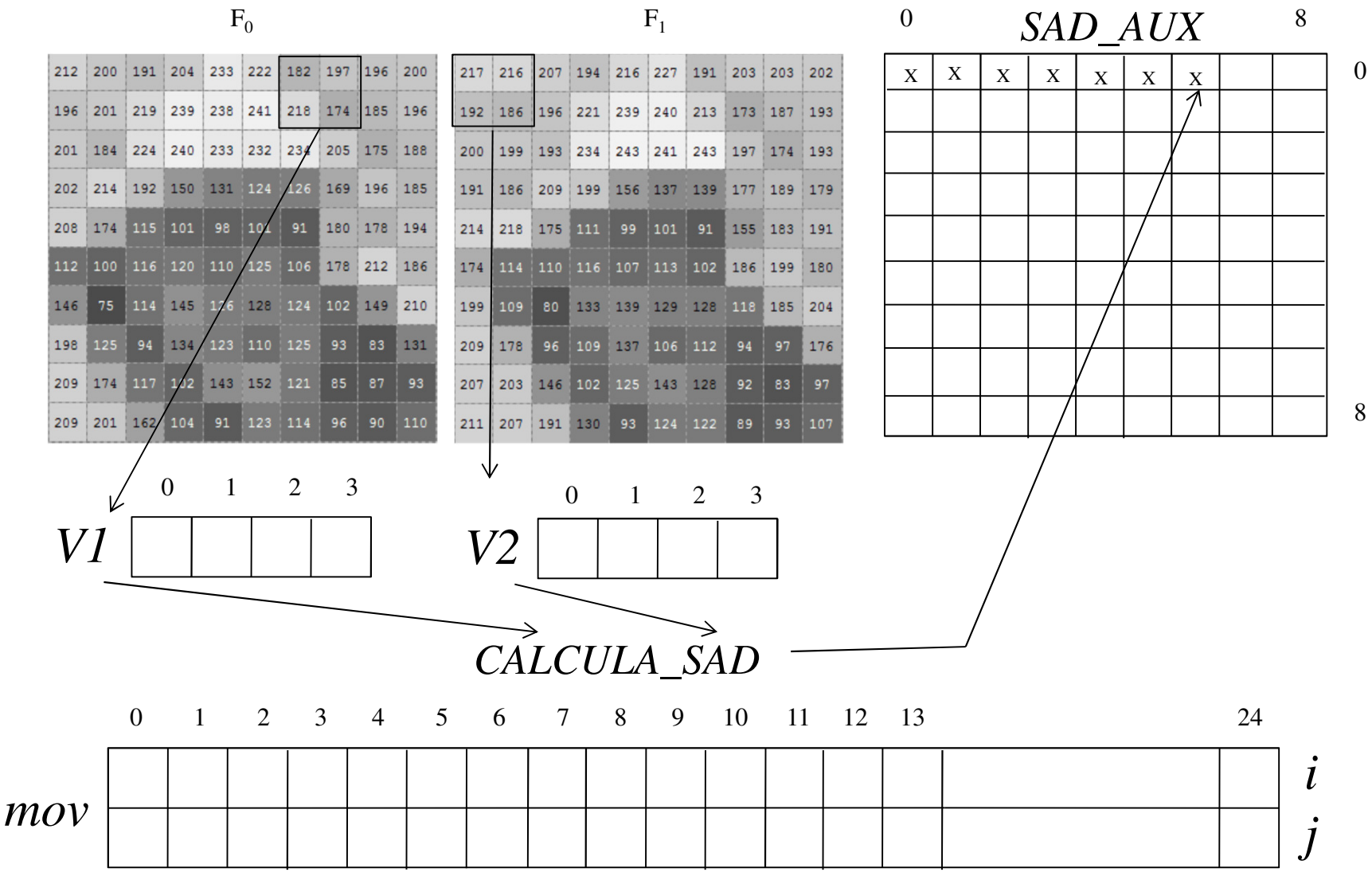
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mov
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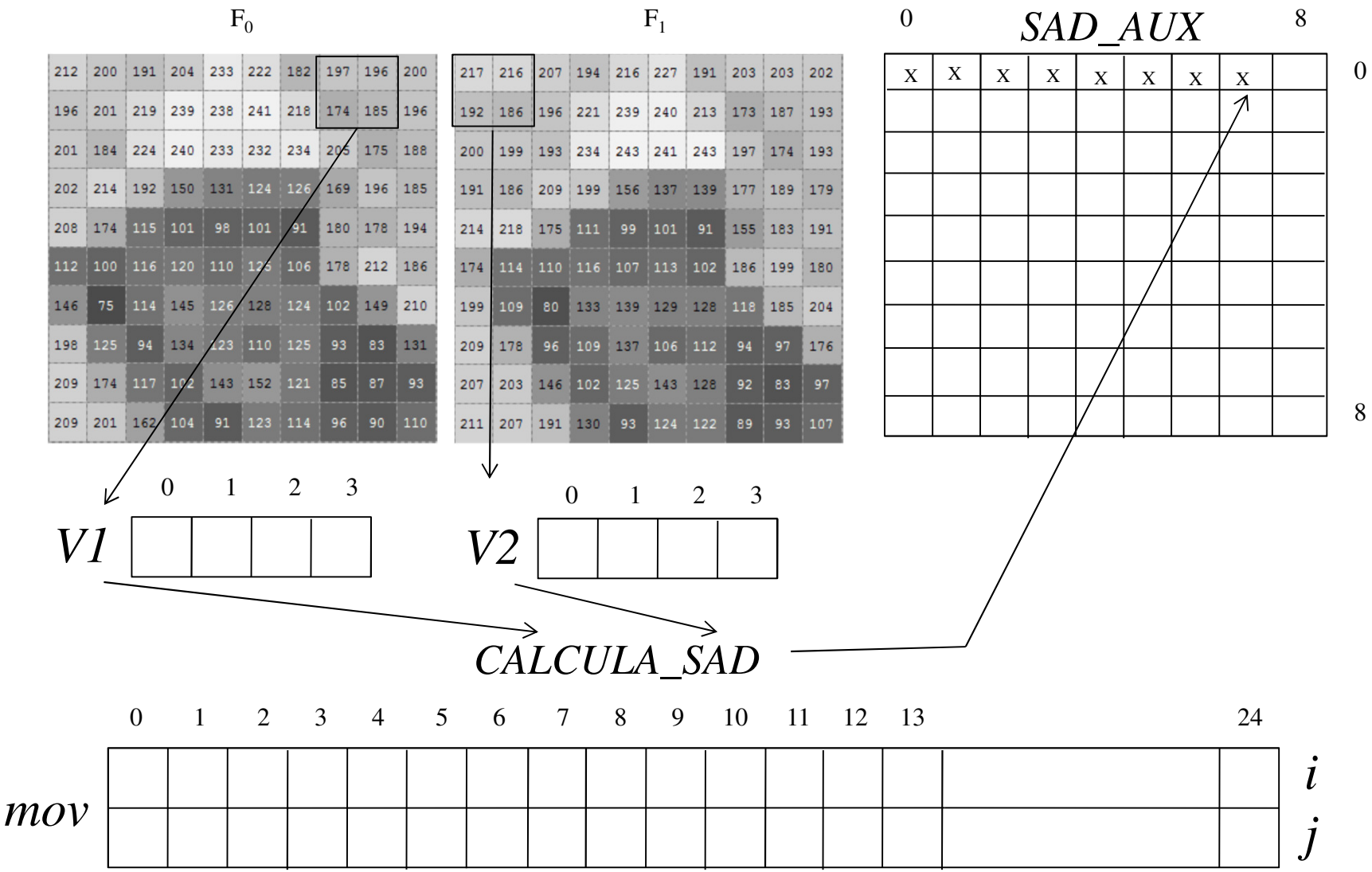
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V1
V2
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CALCULA_SAD
mov
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i
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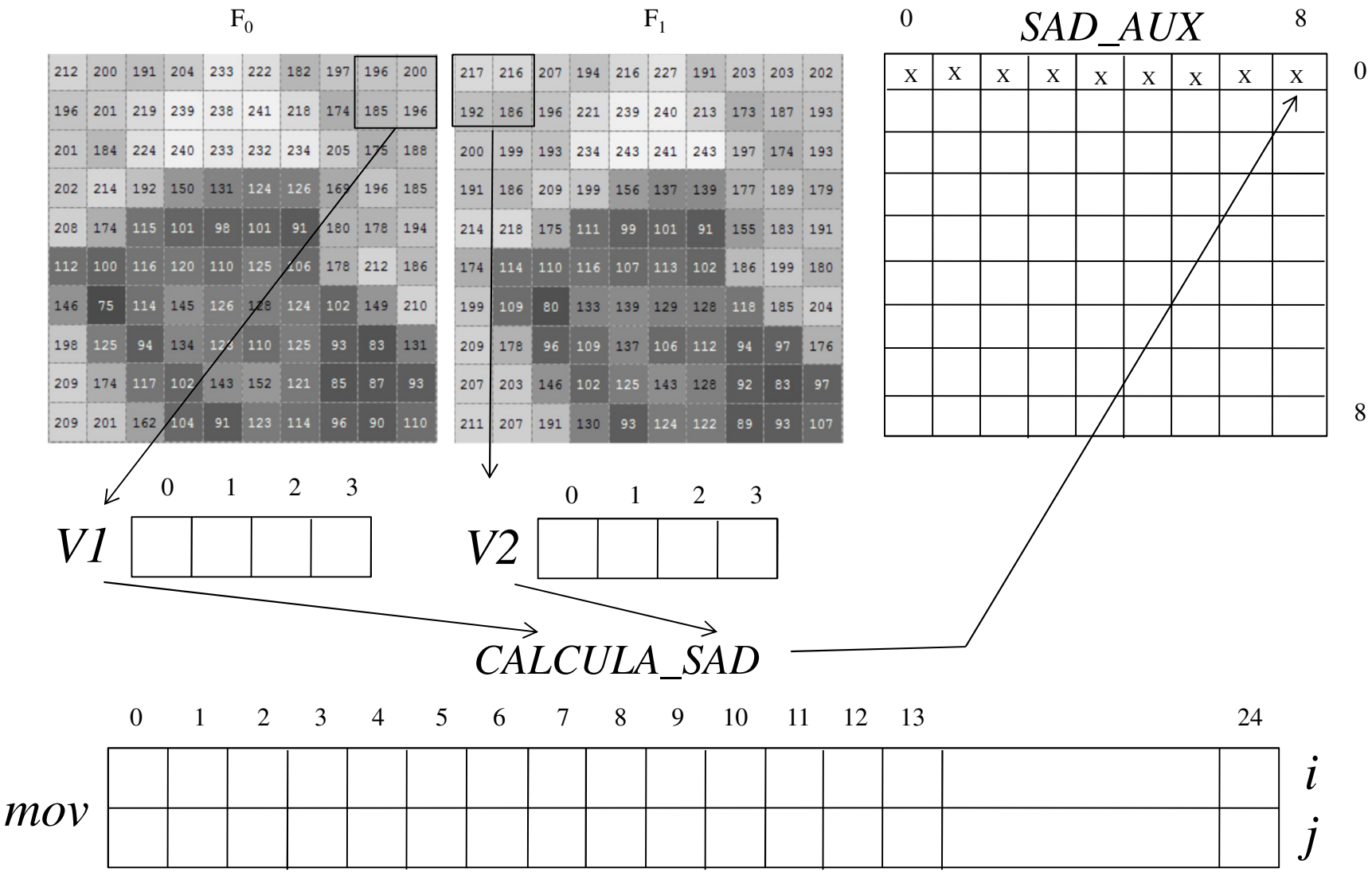
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V1
V2
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mov
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i
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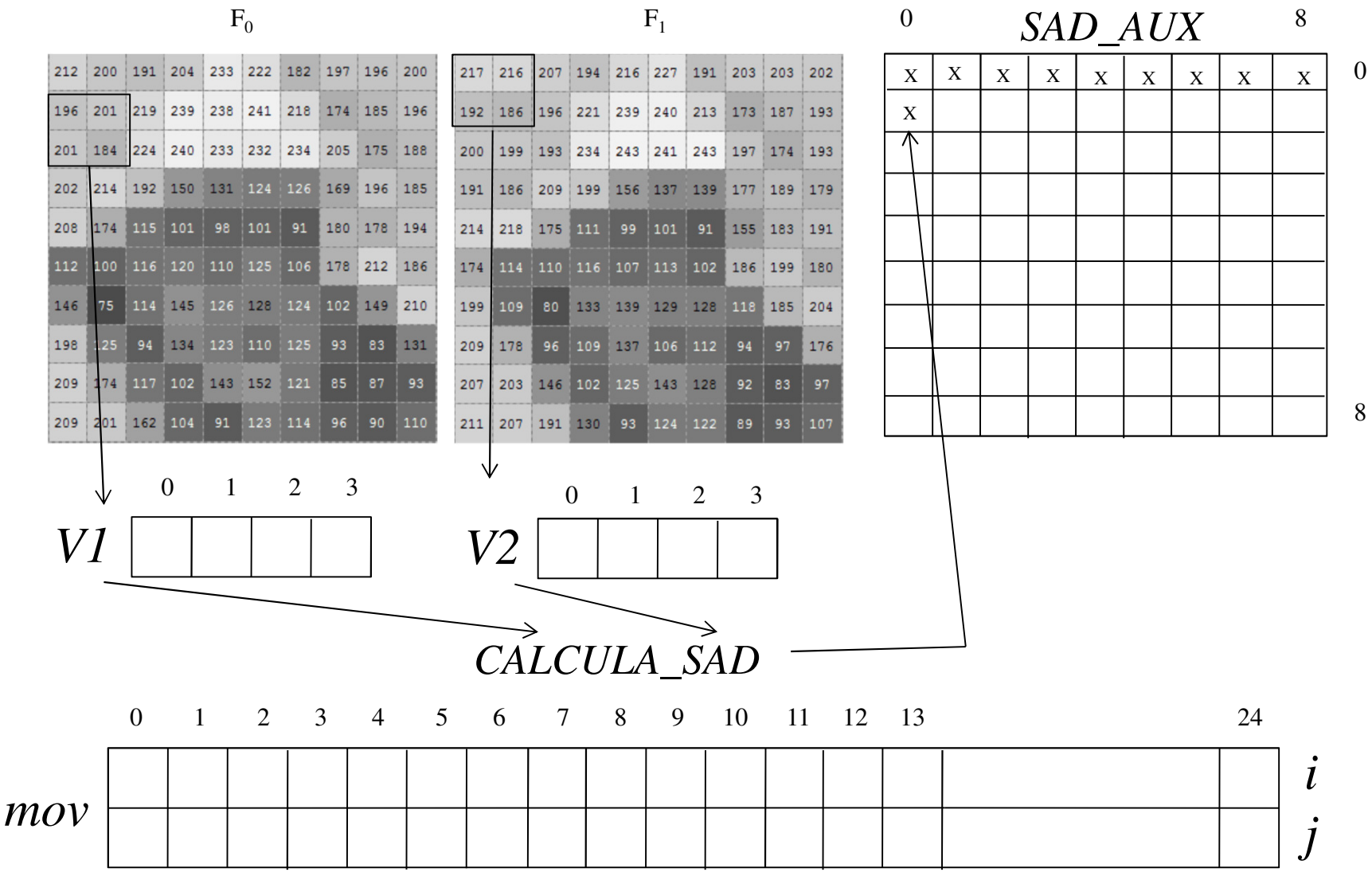
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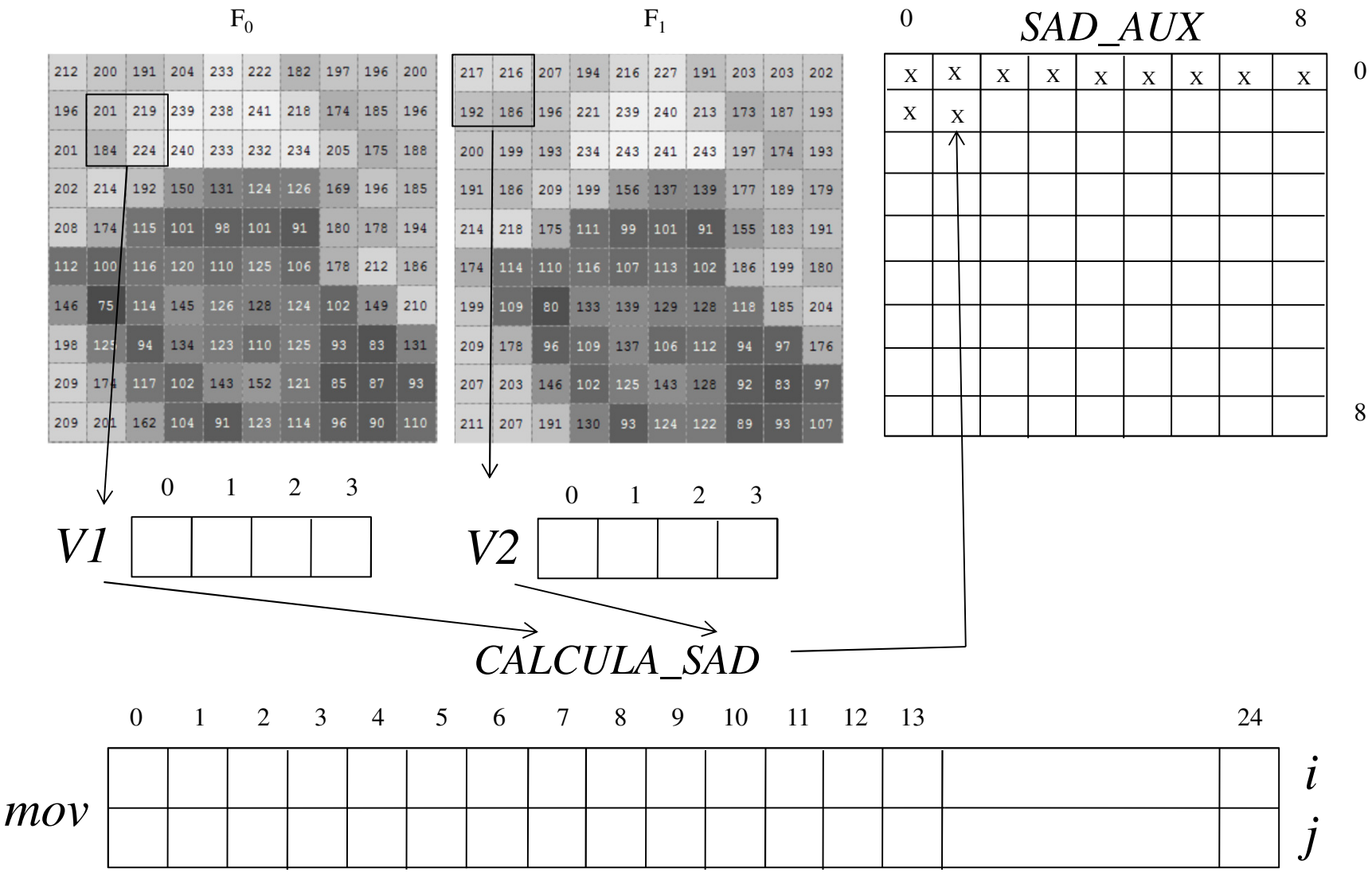
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V1
V2
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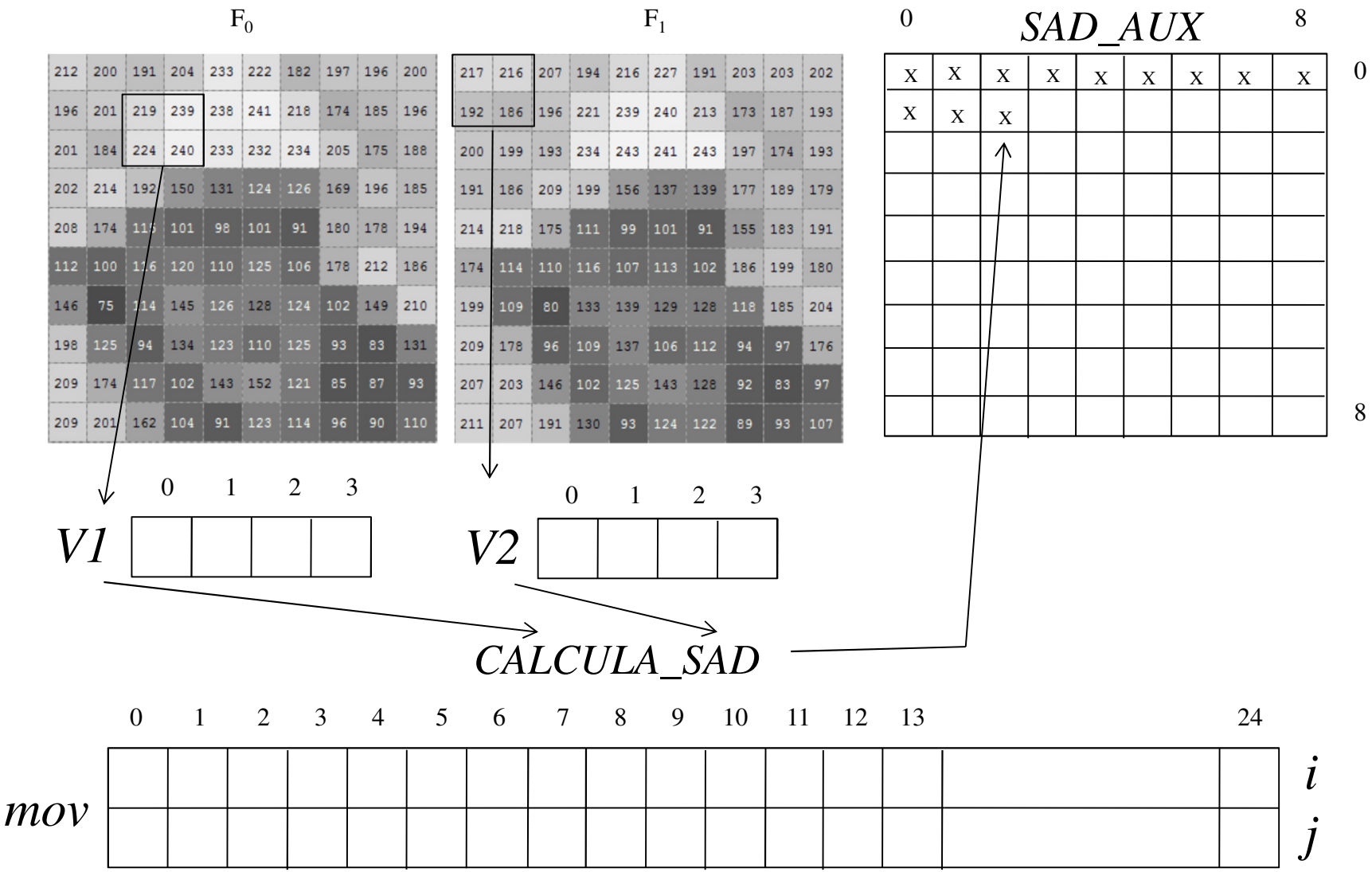
mov
i
j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i
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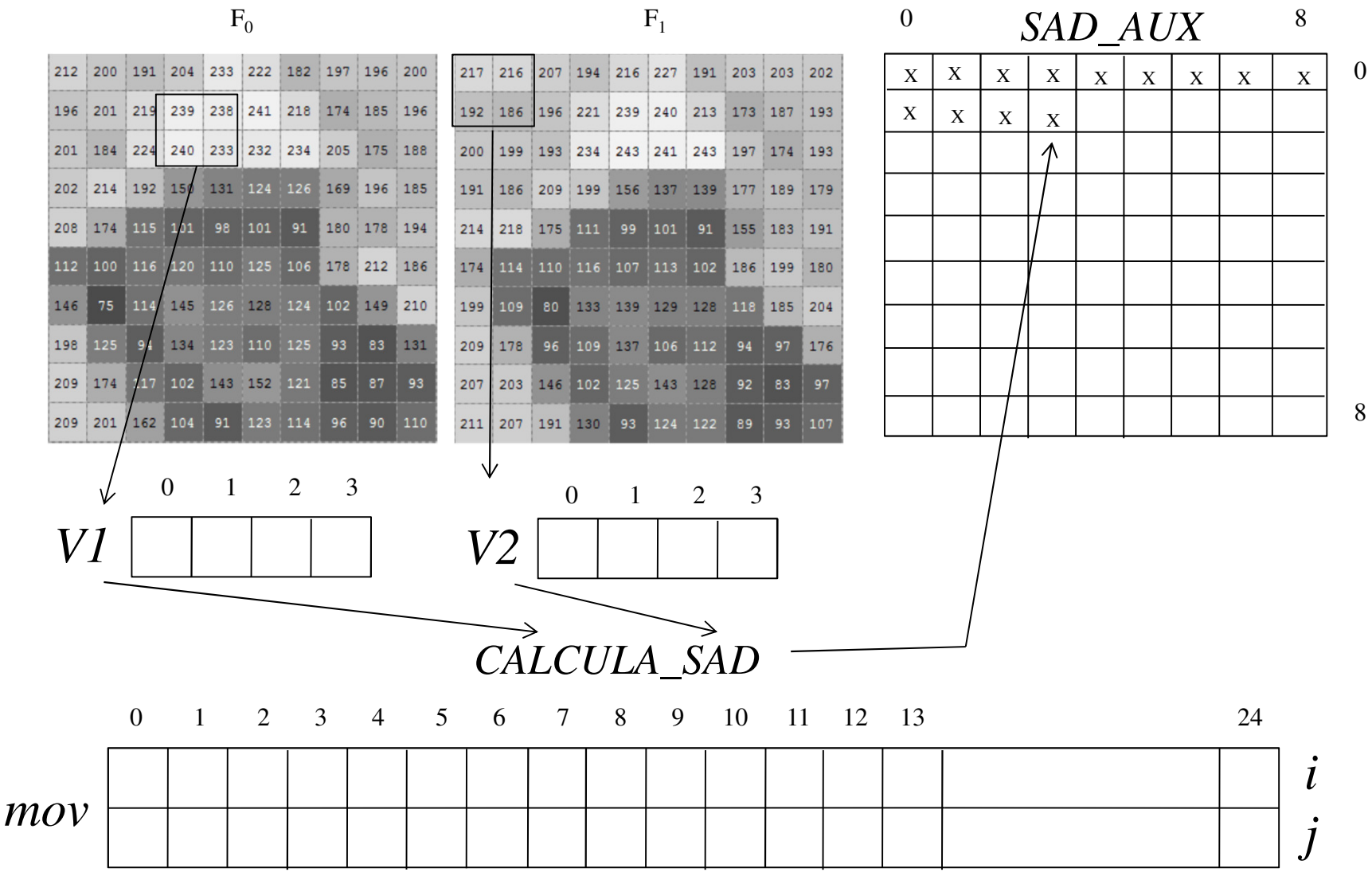
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0 1 2 3
V2
CALCULA_SAD
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mov
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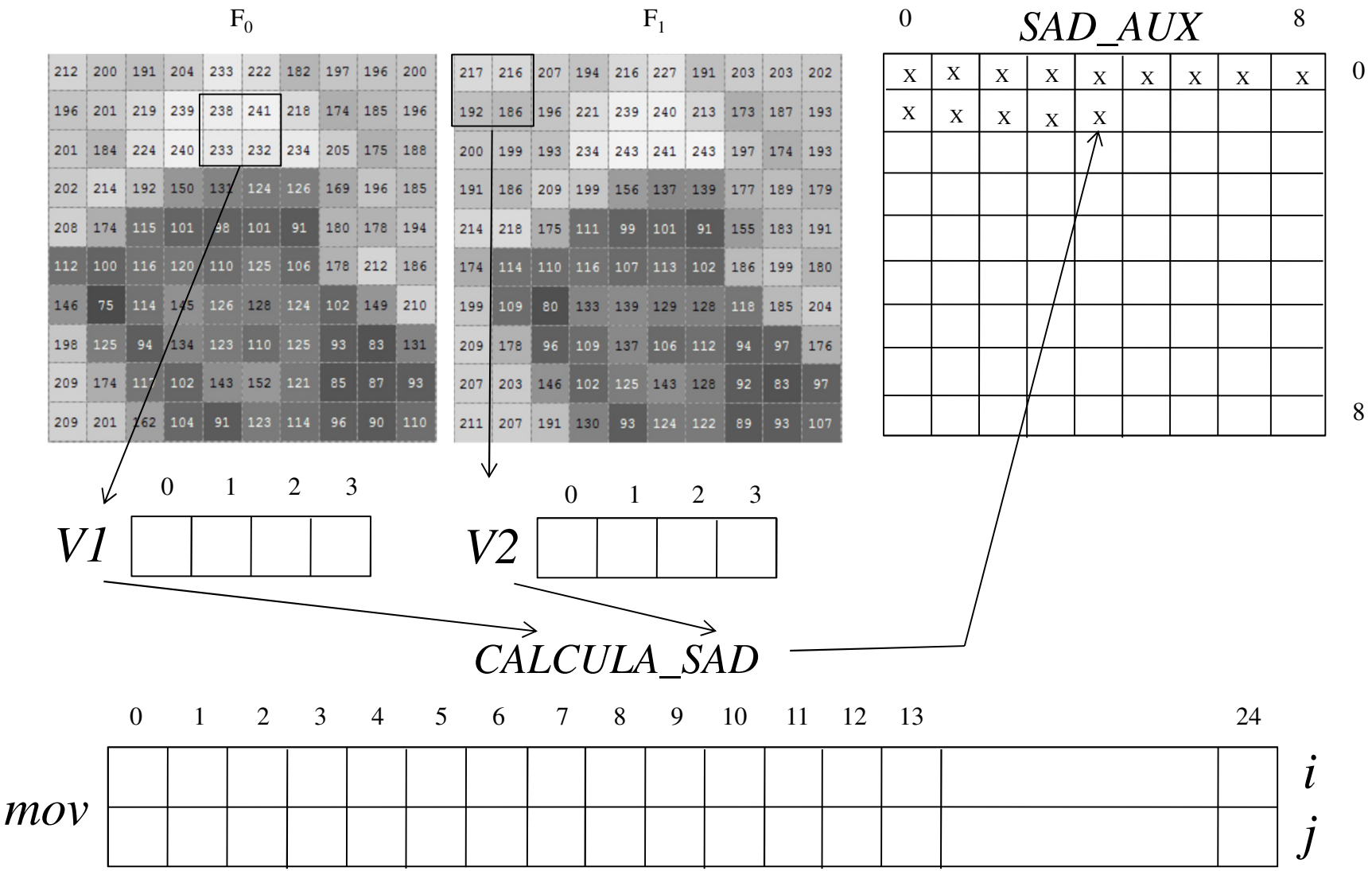
j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V2
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CALCULA_SAD
mov
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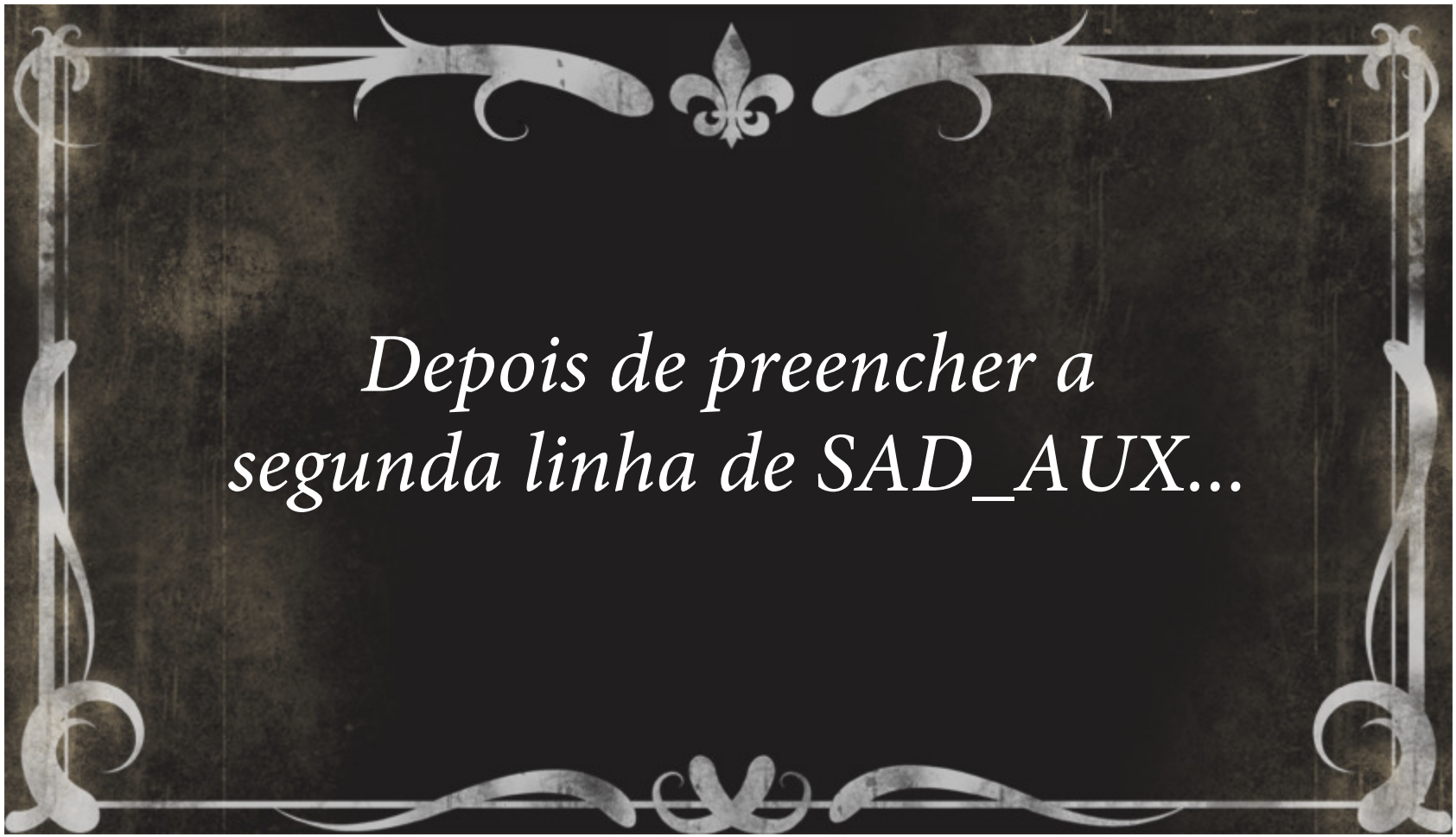
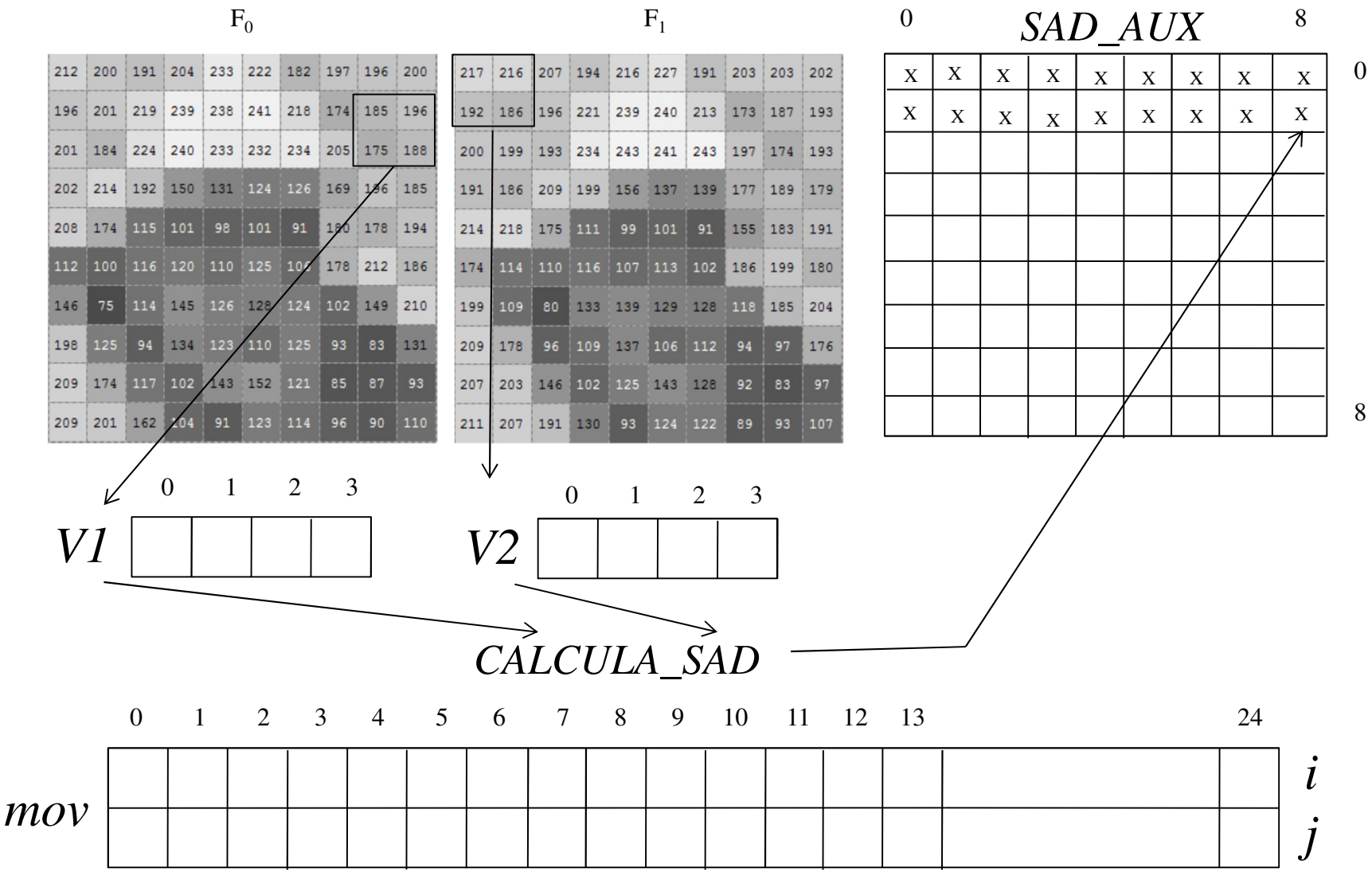
i
j


Depois de preencher a
segunda linha de SAD_AUX...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F1
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SAD_AUX
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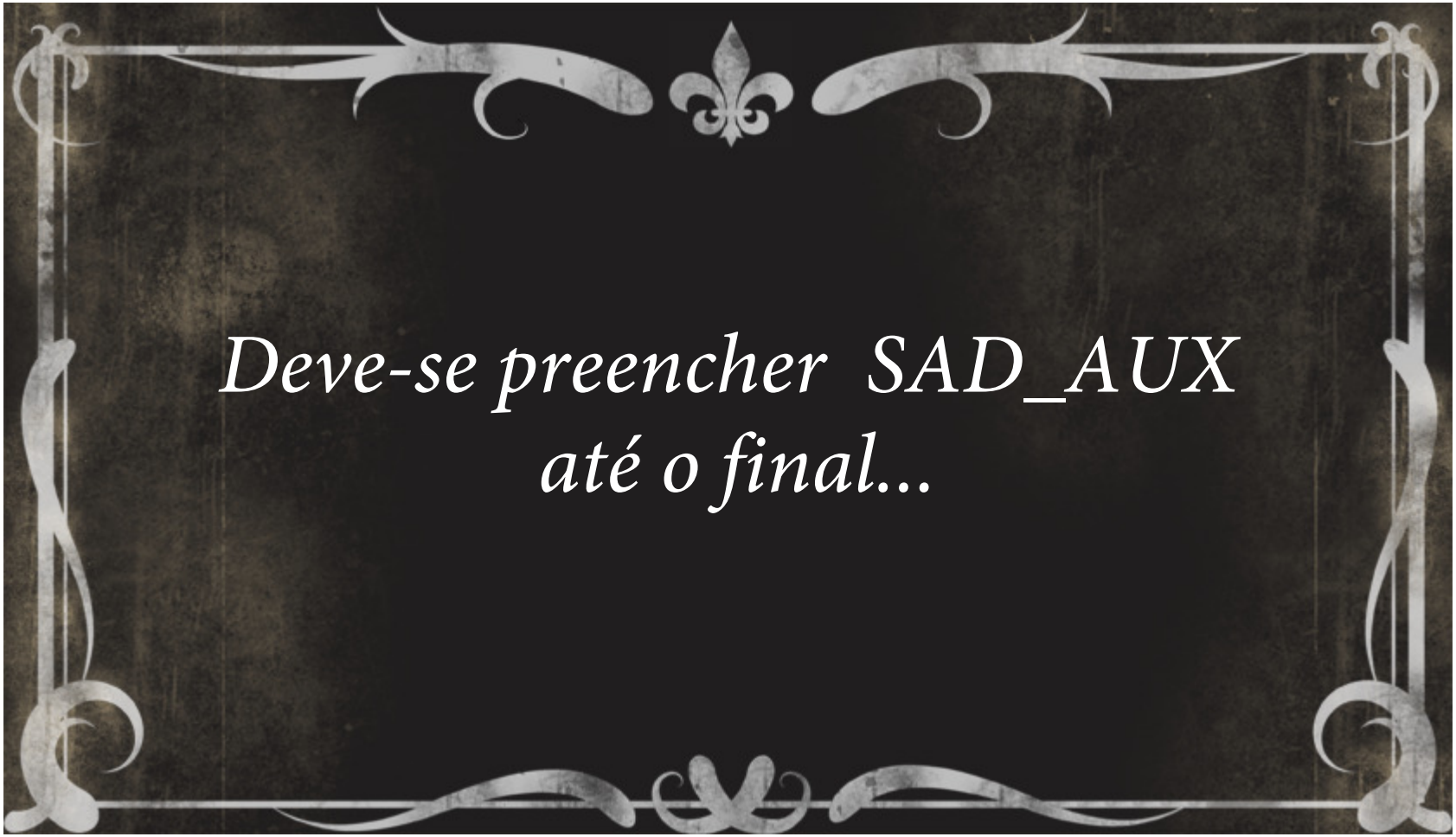
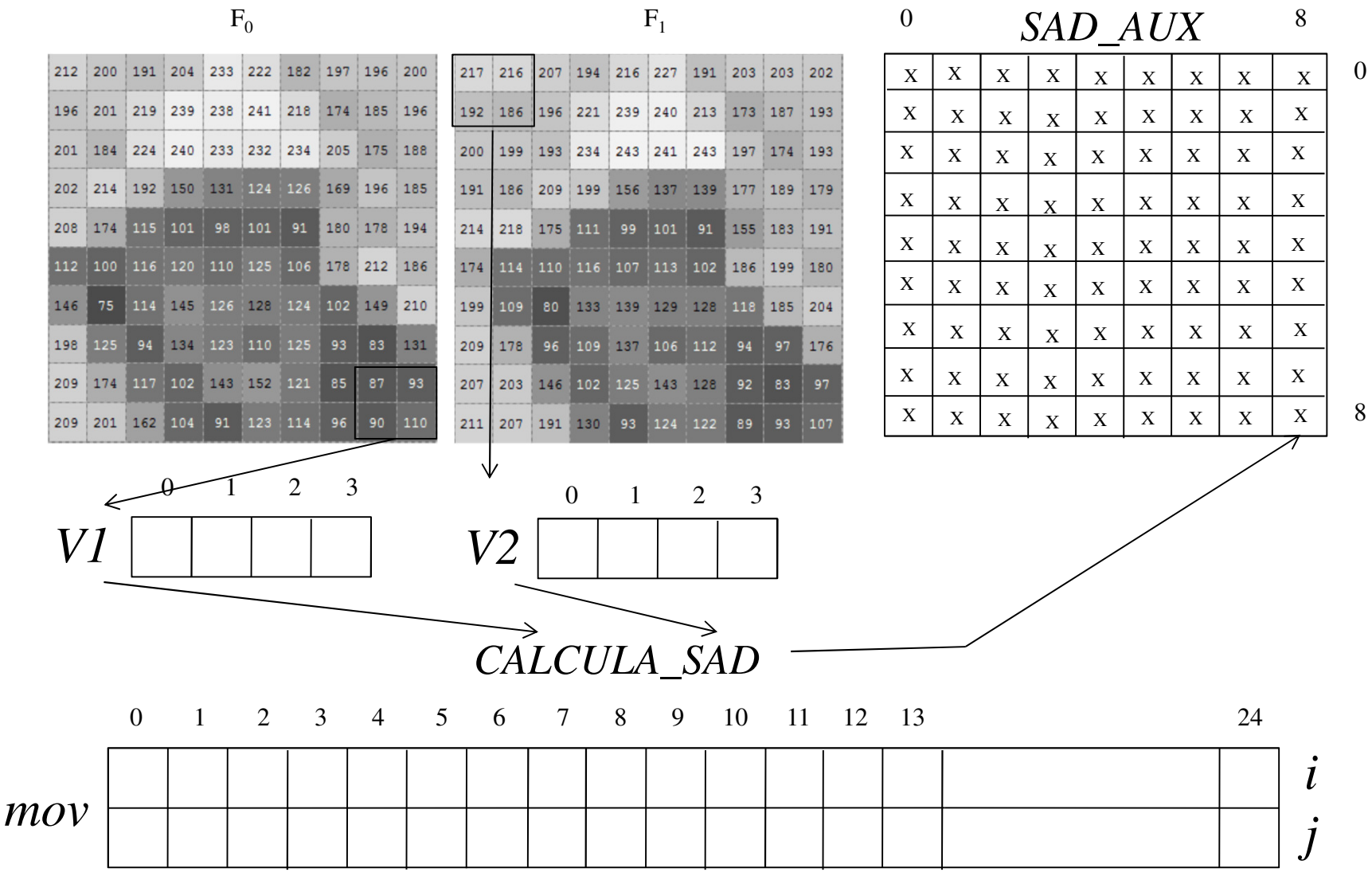
8
0 1 2 3
V1
0 1 2 3
V2
CALCULA_SAD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
i
j


Deve-se preencher SAD_AUX
até o final...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SAD_AUX
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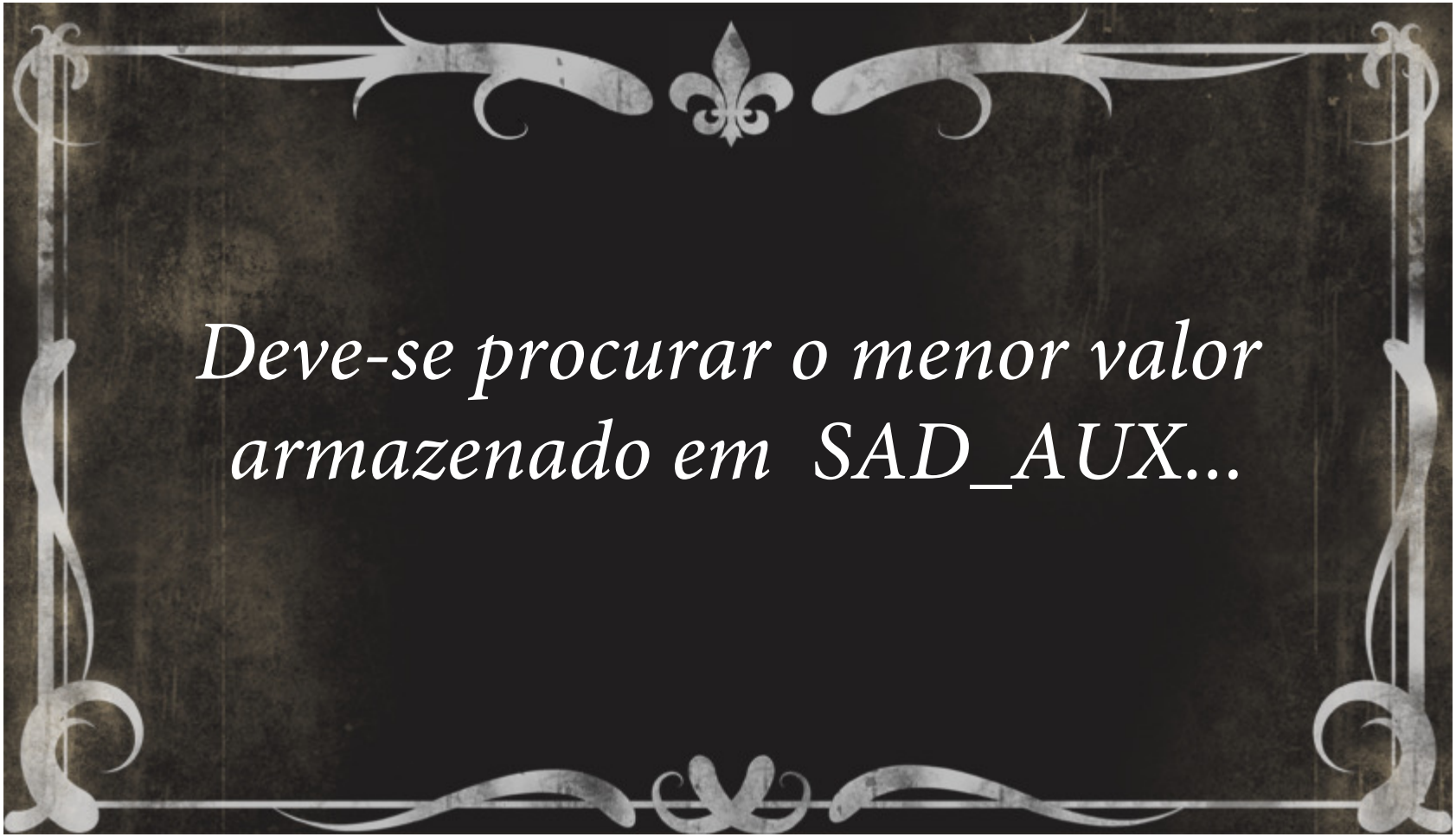
0 1 2 3
V1
0 1 2 3
V2
CALCULA_SAD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
i
j


Deve-se procurar o menor valor armazenado em SAD_AUX...

F_0

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196	201	219	239	238	241	218	174	185	196
201	184	224	240	233	232	234	205	175	188
202	214	192	150	131	124	126	169	196	185
208	174	115	101	98	101	91	180	178	194
112	100	116	120	110	125	106	178	212	186
146	75	114	145	126	128	124	102	149	210
198	125	94	134	123	110	125	93	83	131
209	174	117	102	143	152	121	85	87	93
209	201	162	104	91	123	114	96	90	110

F_1

217	216	207	194	216	227	191	203	203	202
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200	199	193	234	243	241	243	197	174	193
191	186	209	199	156	137	139	177	189	179
214	218	175	111	99	101	91	155	183	191
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199	109	80	133	139	129	128	118	185	204
209	178	96	109	137	106	112	94	97	176
207	203	146	102	125	143	128	92	83	97
211	207	191	130	93	124	122	89	93	107

SAD_AUX

0								8
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x

0 (top) 8 (bottom)

V1

0	1	2	3

V2

0	1	2	3

CALCULA_SAD

0	1	2	3	4	5	6	7	8	9	10	11	12	13		24	
																i
																j

mov

F_0

212	200	191	204	233	222	182	197	196	200
196	201	219	239	238	241	218	174	185	196
201	184	224	240	233	232	234	205	175	188
202	214	192	150	131	124	126	169	196	185
208	174	115	101	98	101	91	180	178	194
112	100	116	120	110	125	106	178	212	186
146	75	114	145	126	128	124	102	149	210
198	125	94	134	123	110	125	93	83	131
209	174	117	102	143	152	121	85	87	93
209	201	162	104	91	123	114	96	90	110

F_1

217	216	207	194	216	227	191	203	203	202
192	186	196	221	239	240	213	173	187	193
200	199	193	234	243	241	243	197	174	193
191	186	209	199	156	137	139	177	189	179
214	218	175	111	99	101	91	155	183	191
174	114	110	116	107	113	102	186	199	180
199	109	80	133	139	129	128	118	185	204
209	178	96	109	137	106	112	94	97	176
207	203	146	102	125	143	128	92	83	97
211	207	191	130	93	124	122	89	93	107

SAD_AUX

0								8
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x	x

0

8

V1

0	1	2	3

V2

0	1	2	3

Suponha que este seja o menor valor...

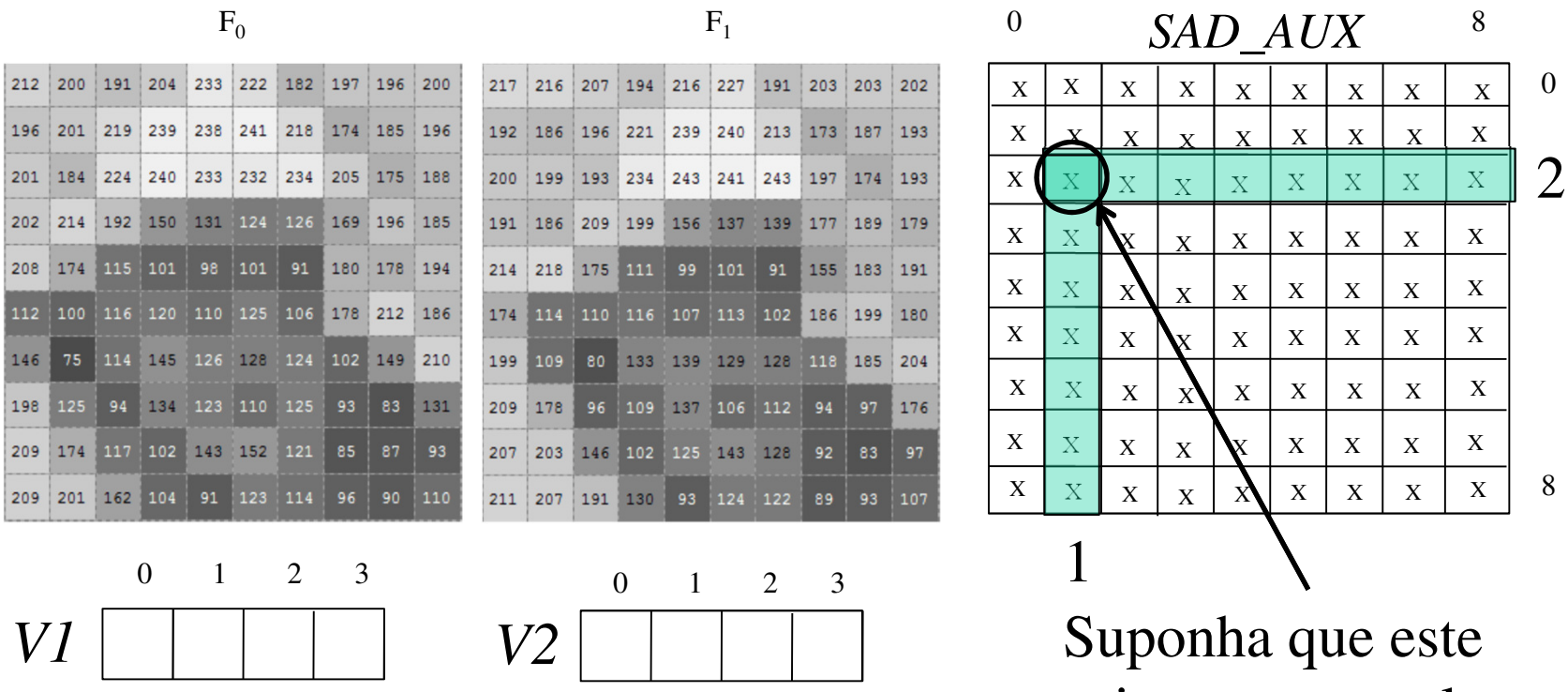
CALCULA_SAD

mov

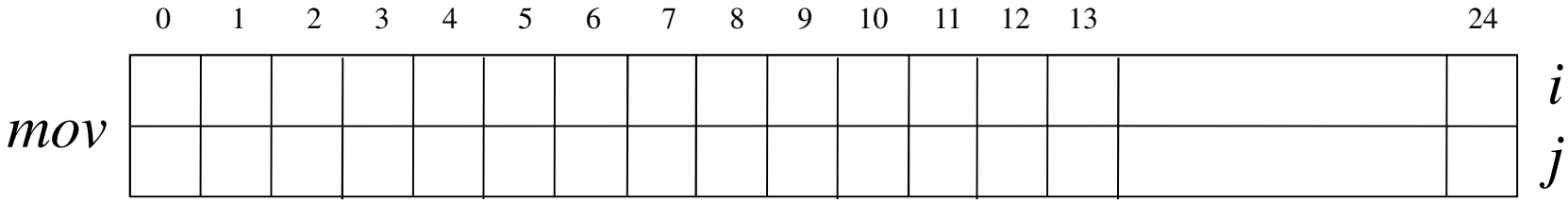
0	1	2	3	4	5	6	7	8	9	10	11	12	13		24

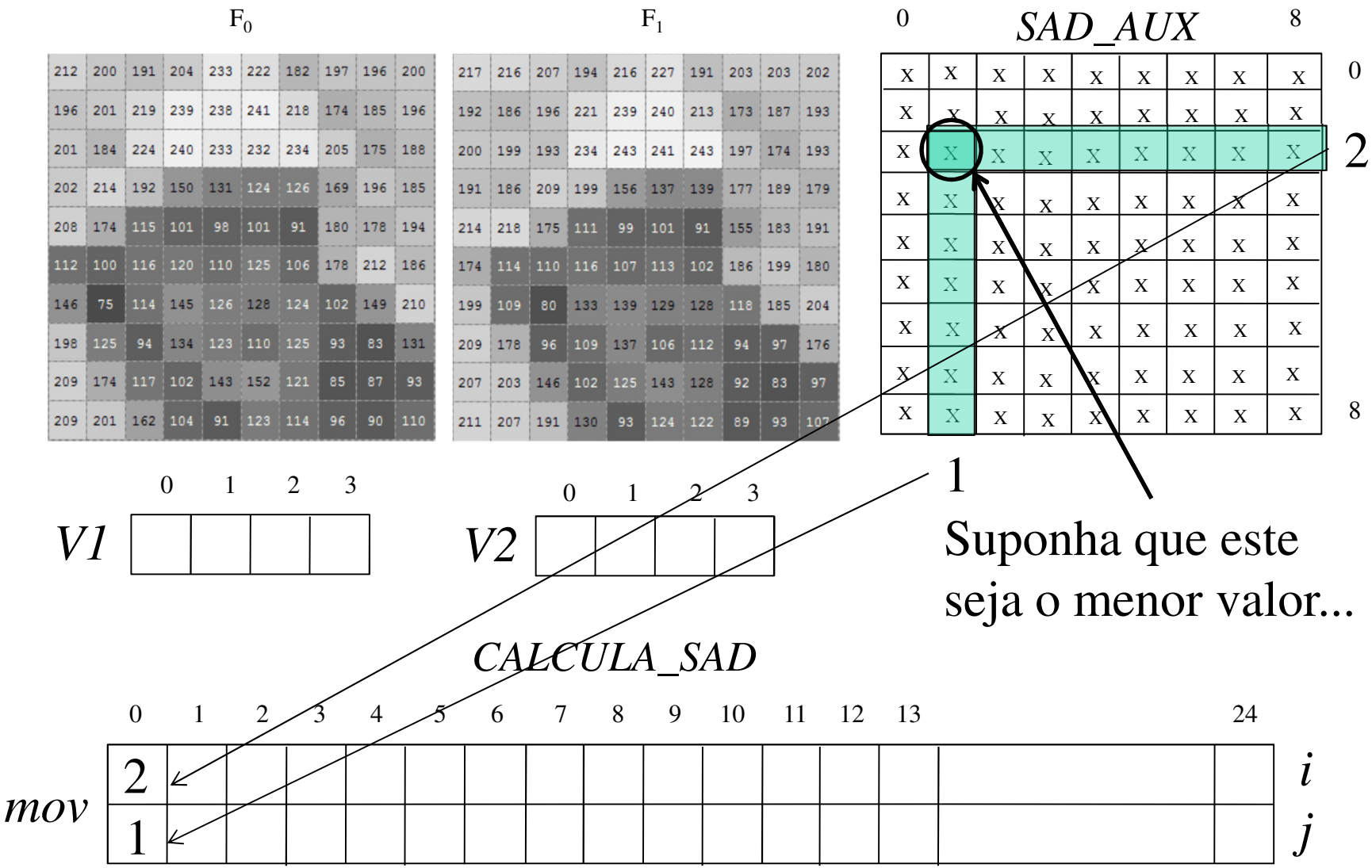
i

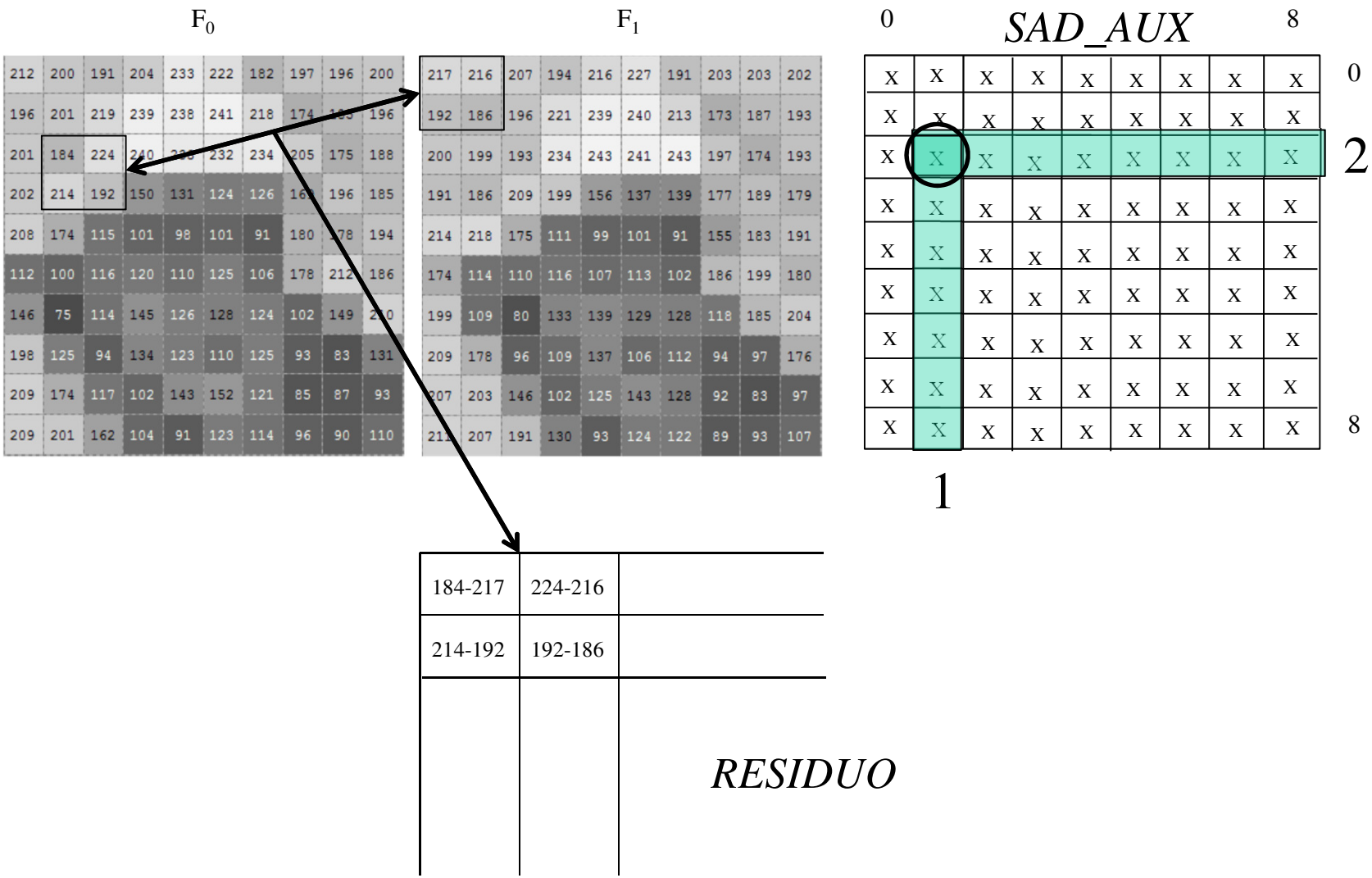
j

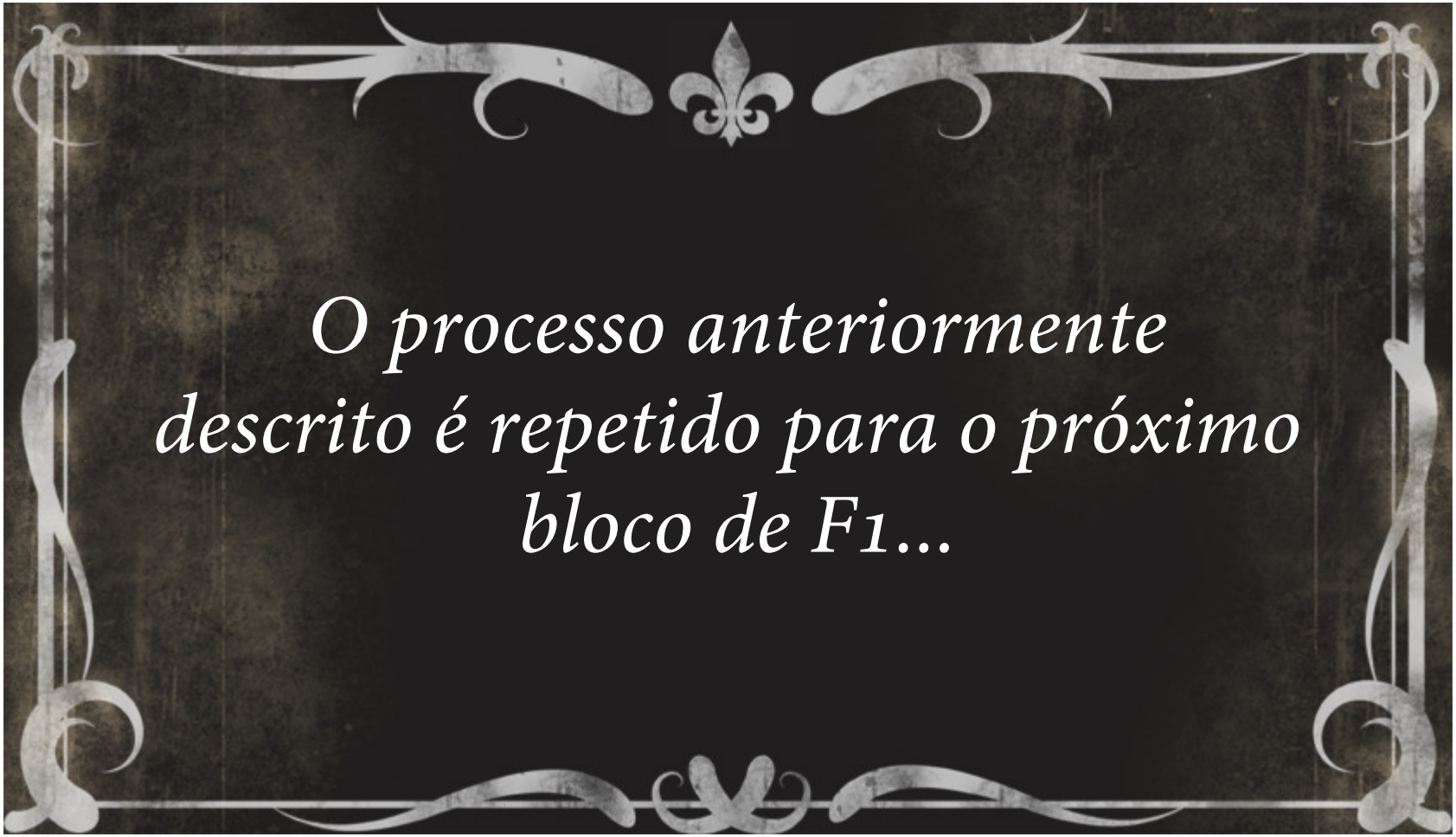

F0
F1
SAD_AUX
0
8
0
2
8
1
V1
V2
0 1 2 3
Suponha que este seja o menor valor...

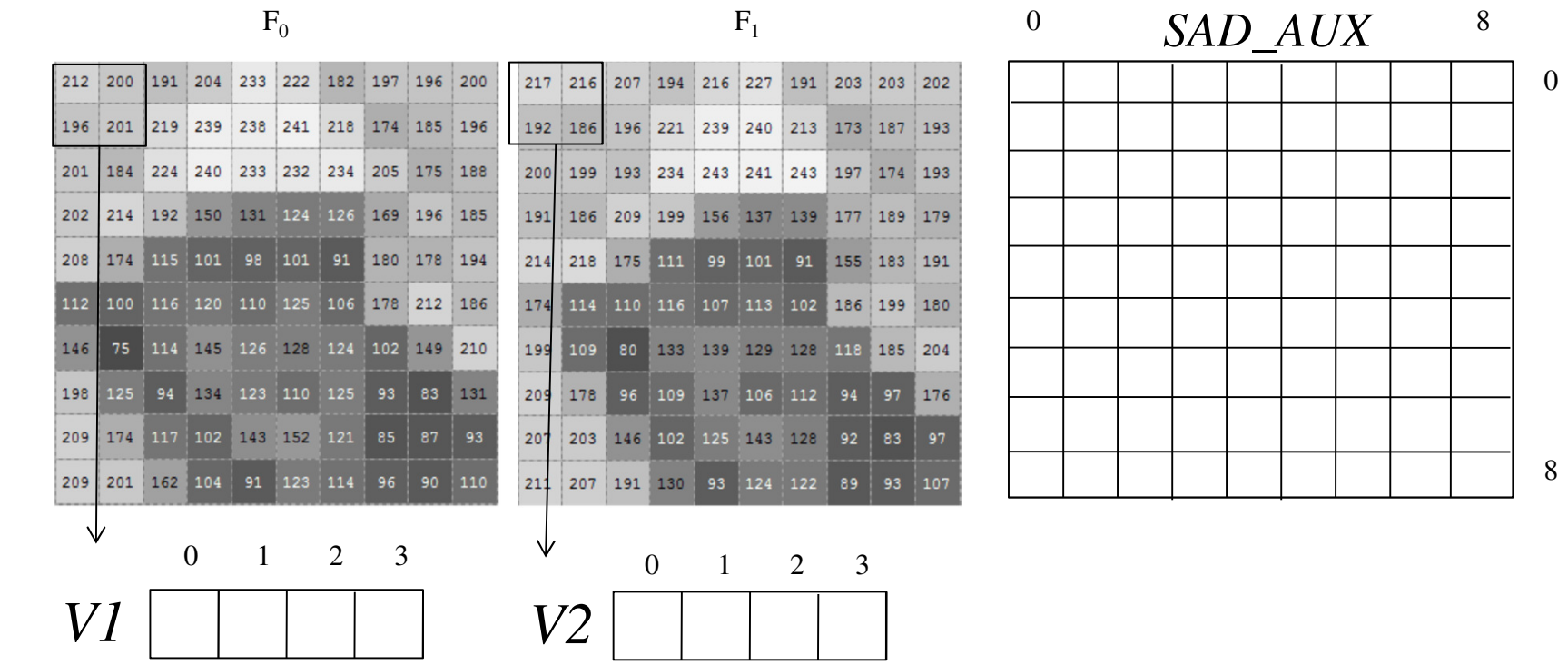
CALCULA_SAD

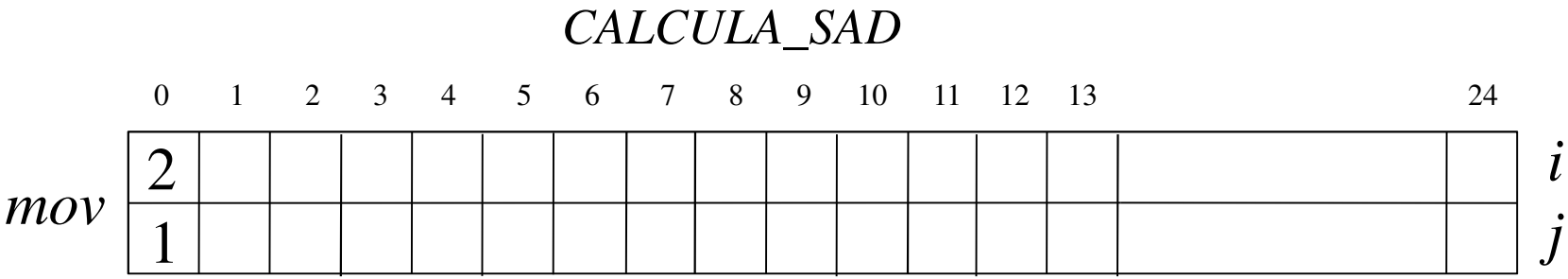

0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
i
j

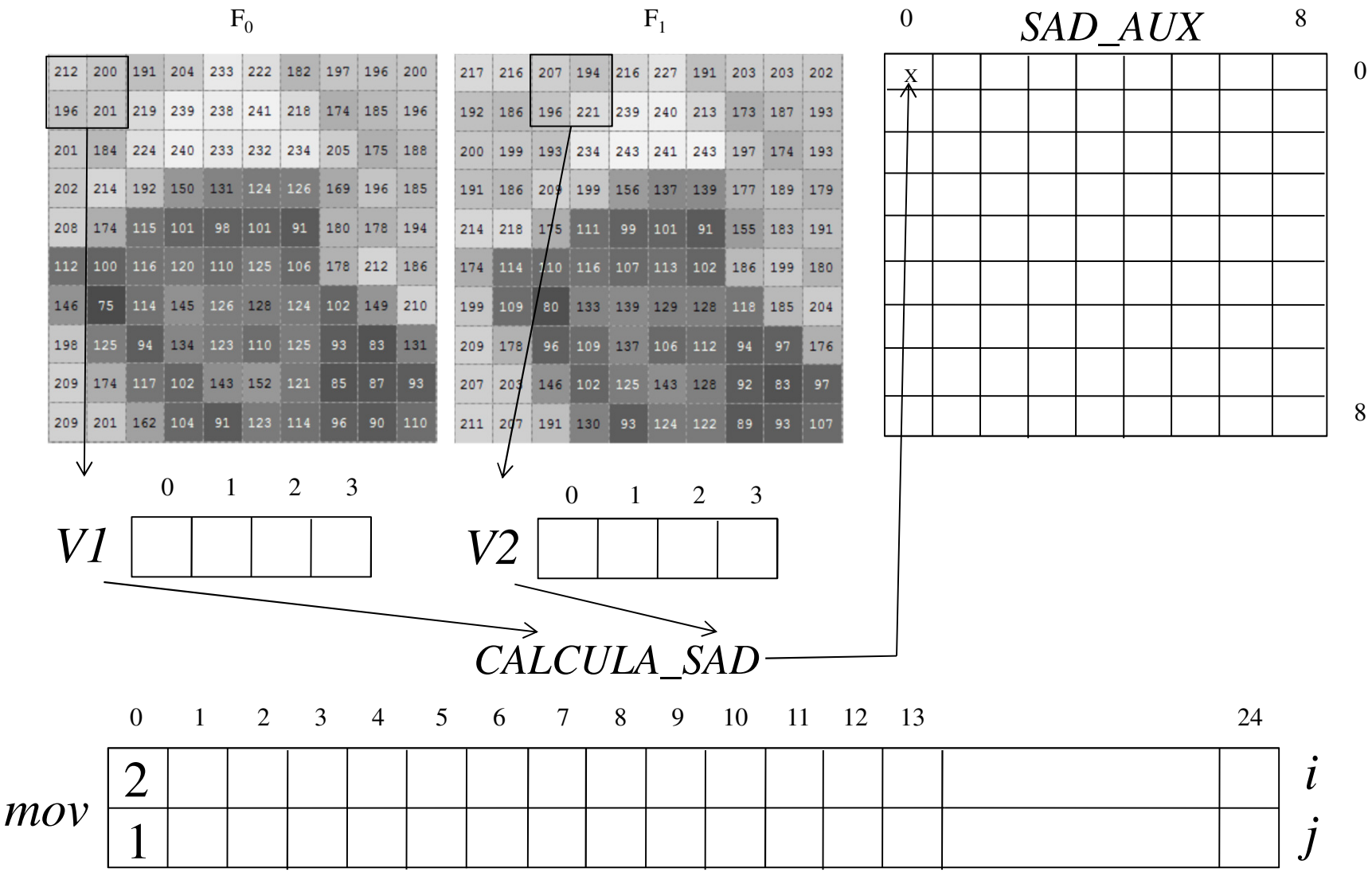

F0
F1
SAD_AUX
0
8
0
2
8
1
V1
V2
0 1 2 3
Suponha que este seja o menor valor...
CALCULA_SAD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
2
1
i
j

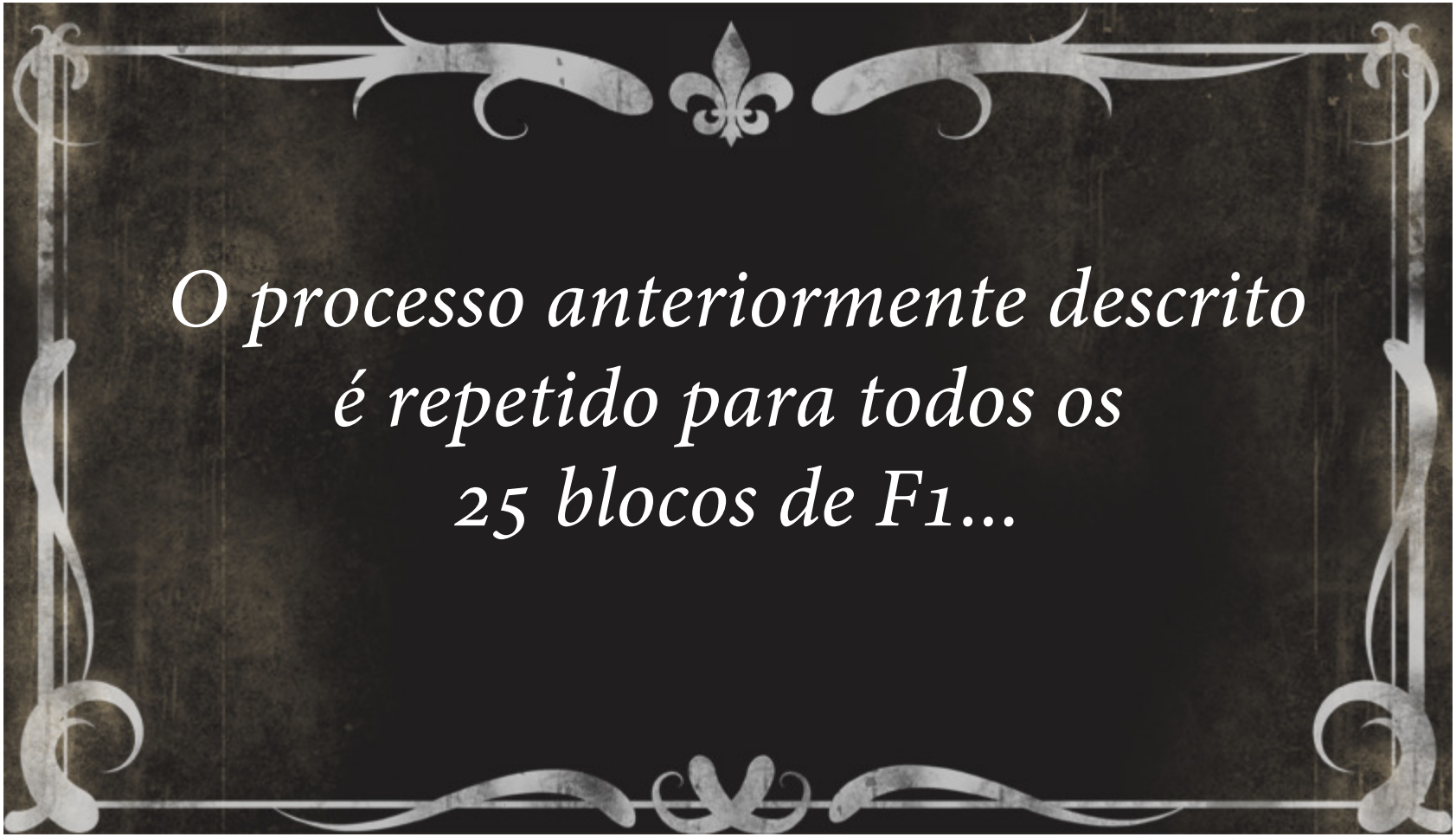

F0
F1
0
SAD_AUX
8
0
2
8
1
184-217
224-216
214-192
192-186
RESIDUO


O processo anteriormente descrito é repetido para o próximo bloco de F1...


F0
F1
0
SAD_AUX
8
0
8
212 200 191 204 233 222 182 197 196 200
196 201 219 239 238 241 218 174 185 196
201 184 224 240 233 232 234 205 175 188
202 214 192 150 131 124 126 169 196 185
208 174 115 101 98 101 91 180 178 194
112 100 116 120 110 125 106 178 212 186
146 75 114 145 126 128 124 102 149 210
198 125 94 134 123 110 125 93 83 131
209 174 117 102 143 152 121 85 87 93
209 201 162 104 91 123 114 96 90 110
217 216 207 194 216 227 191 203 203 202
192 186 196 221 239 240 213 173 187 193
200 199 193 234 243 241 243 197 174 193
191 186 209 199 156 137 139 177 189 179
214 218 175 111 99 101 91 155 183 191
174 114 110 116 107 113 102 186 199 180
199 109 80 133 139 129 128 118 185 204
209 178 96 109 137 106 112 94 97 176
207 203 146 102 125 143 128 92 83 97
211 207 191 130 93 124 122 89 93 107
0 1 2 3
V1
0 1 2 3
V2


CALCULA_SAD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
2
1
i
j


F0
F1
0
SAD_AUX
8
0
8
X
212 200 191 204 233 222 182 197 196 200
196 201 219 239 238 241 218 174 185 196
201 184 224 240 233 232 234 205 175 188
202 214 192 150 131 124 126 169 196 185
208 174 115 101 98 101 91 180 178 194
112 100 116 120 110 125 106 178 212 186
146 75 114 145 126 128 124 102 149 210
198 125 94 134 123 110 125 93 83 131
209 174 117 102 143 152 121 85 87 93
209 201 162 104 91 123 114 96 90 110
217 216 207 194 216 227 191 203 203 202
192 186 196 221 239 240 213 173 187 193
200 199 193 234 243 241 243 197 174 193
191 186 209 199 156 137 139 177 189 179
214 218 175 111 99 101 91 155 183 191
174 114 110 116 107 113 102 186 199 180
199 109 80 133 139 129 128 118 185 204
209 178 96 109 137 106 112 94 97 176
207 203 146 102 125 143 128 92 83 97
211 207 191 130 93 124 122 89 93 107
0 1 2 3
V1
0 1 2 3
V2
CALCULA_SAD
0 1 2 3 4 5 6 7 8 9 10 11 12 13 24
mov
2
1
i
j


O processo anteriormente descrito
é repetido para todos os
25 blocos de F1...


FIM