ESTADO INICIAL DE LA MEMORIA

	Caché P0			
posición	**0**	**1**	**2**	**3**
pal-0				
pal-1				
pal-2				
pal-3				
etiq	**-1**	**-1**	**-1**	**-1**
Estado	I	I	I	I

Sección Mem Compartida en P0					
0	**0**	**0**	**4**	**64**	**0**
	4	**0**		**68**	**0**
	8	**0**		**72**	**0**
	12	**0**		**76**	**0**
1	**16**	**0**	**5**	**80**	**0**
	20	**0**		**84**	**0**
	24	**0**		**88**	**0**
	28	**0**		**92**	**0**
2	**32**	**0**	**6**	**96**	**0**
	36	**0**		**100**	**0**
	40	**0**		**104**	**0**
	44	**0**		**108**	**0**
3	**48**	**0**	**7**	**112**	**0**
	52	**0**		**116**	**0**
	56	**0**		**120**	**0**
	60	**0**		**124**	**0**

et.	instrucción		resultado	codificada	HILO
	DADDI	R4 ,R0 ,#4	R4 = 4	8 0 4 4	
	DADDI	R1, R0, #15	R1 = 15	8 0 1 15	
	DADDI	R20, R0, #24	R20 = 24	8 0 20 24	
	DADDI	R2, R0, #0	R2 = 0	8 0 2 0	
Allá	DADDI	R5, R0, #1000	R5 = 1000	8 0 5 1000	
AHÍ	DSUB	R5, R5, R1	R5 -= 1	34 5 1 5	
	BNEZ	R5, **AHÍ**	Ejecuta el salto mil veces	5 5 0 -2	
	SW	R1, 0(R2)	M[R2] = 15	43 2 1 0	
	SW	R1, 4(R2)	M[R2+4] = 15	43 2 1 4	
	SW	R1, 8(R2)	M[R2+8] = 15	43 2 1 8	1
	SW	R1, 12(R2)	M[R2+12] = 15	43 2 1 12	
	DSUB	R20, R20, R4	R20 -= 4	34 20 4 20	
	DADDI	R2, R2, #16	R2 +=16	8 2 2 16	
	BNEZ	R20, **Allá**	Ejecuta el salto 5 veces	5 20 0 -10	
	DADDI	R31, R0, #99	R31= 99	8 0 31 99	
	SW	R31, 100(R0)	M[100] = 99	43 0 31 100	
	LW	R13, 92(R0)	R13= M [92] =15	35 0 13 92	
	LW	R12 , 0 (R0)	R12 = M [0] = 15	35 0 12 0	
	LW	R14, 28(R0)	R14 = M[28] = 15	35 0 14 28	
	LW	R15, 120(R0)	R15 = M[120] = 0	35 0 15 0	
	FIN		FINALIZA	63 0 0 0	

se guarda un 15 en esas direcciones de memoria

r2	0	16	32	48	64	80	96
r20	24	20	16	12	8	4	

0	16	32	48	64	80
4	20	36	52	68	84
8	24	40	56	72	88
12	28	44	60	76	92

r2	16	32	48	64	80	96
r20	20	16	12	8	4	0

M[100] = 99
R13= M [92] =15
R12 = M [0] = 15
R14 = M[28] = 15
R15 = M[120] = 0

	DADDI	R4 ,R0 ,#5	R4 = 5	8 0 4 5	
	DADDI	R2, R0, #-48	R2 = -48	8 0 2 -48	
	DADDI	R28, R0, #25	R28 = 25	8 0 28 25	
	DADDI	R16, R0, #88	R16= 88	8 0 16 88	
ALLÁ	DADDI	R5, R0, #1000	R5 = 1000	8 0 5 1000	
	SW	R2, 0(R16)	M[R16] =-48	43 16 2 0	
	SW	R2, -4(R16)	M[R16+-4] = -48	43 16 2 -4	
	SW	R2, -8(R16)	M[R16+-8] = -48	43 16 2 -8	
	SW	R2, -12(R16)	M[R16+-12] = -48	43 16 2 -12	
	DSUB	R28, R28, R4	R28 -= 5	34 28 4 28	
	DADDI	R16, R16, #-16	R16 -=16	8 16 16 -16	
AQUÍ	DADDI	R5, R5, #-1	R5 -= 1	8 5 5 -1	2
	BNEZ	R5, AQUÍ	Ejecuta el salto mil veces	5 5 0 -2	
	BNEZ	R28, ALLÁ	Ejecuta el salto 4 veces	5 28 0 -10	
	DADDI	R31, R0, #77	R31= 77	8 0 31 77	
	SW	R31,0(R0)	M[0] = 77	43 0 31 0	
	LW	R13, 92(R0)	R13= M [92] = 15	35 0 13 92	
	LW	R11 , 100 (R0)	R11 = M [100] = 99	35 0 11 100	
	LW	R14, 28(R0)	R14 = M[28] = -48	35 0 14 28	
	LW	R15, 120 (R0)	R15 = M[120] = 0	35 0 15 120	
	FIN		FINALIZA	63 0 0 0	

se guarda un -48 en esas posiciones de memoria

r16	88	72	56	40	24
r28	25	20	15	10	5
	88	72	56	40	24
	84	68	52	36	20
	80	64	48	32	16
	76	60	44	28	12
r16	72	56	40	24	8
r28	20	15	10	5	0
	s	s	s	s	ns

77 en pal 0 de bloque 0

R13, 92(R0)	15
R11 , 100 (R0)	99
R14, 28(R0)	-48
R15, 120 (R0)	0

	DADDI	R4 ,R0 ,#4	R4 = 4	8 0 4 4	
	DADDI	R3, R0, #3	R3= 3	8 0 3 3	
	DADDI	R28, R0, #15	R28 = 15	8 0 28 15	
	DADDI	R24, R0, #104	R24 = 104	8 0 24 104	
ALLÍ	DADDI	R5, R0, #1000	R5 = 1000	8 0 5 1000	
	SW	R3, 0(R24)	M[R24] = 3	43 24 3 0	
	SW	R3, 4(R24)	M[R24+4] = 3	43 24 3 4	
ACÁ	DADDI	R5, R5, #-1	R5 -= 1	8 5 5 -1	
	BNEZ	R5, **ACÁ**	Ejecuta el salto mil veces	5 5 0 -2	
	DSUB	R28, R28, R4	R28 -= 4	34 28 4 28	**3**
	DADDI	R24, R24, #8	R24 +=8	8 24 24 8	
	BNEZ	R28, **ALLÍ**	Ejecuta el salto 2 veces	5 28 0 -10	
	DADDI	R31, R0, #55	R31= 55	8 0 31 55	
	SW	R31, 92(R0)	M[92] = 55	43 0 31 92	
	LW	R11, 96 (R0)	R11 = M [96] = 0	35 0 11 96	
	LW	R12 ,104 (R0)	R12 = M [104] = 3	35 0 12 104	
	LW	R14, 28(R0)	R14 = M[28] = -48	35 0 14 28	
	LW	R15, 0 (R0)	R15 = M[0] = 77	35 0 15 0	
	FIN		FINALIZA	63 0 0 0	

se guarda el valor **3** en esas dir de mem

r24	104	112	120
r28	15	10	5

104	112	120
108	116	124

r24	112	120	128
r28	10	5	0

M 92= 55

R11 = M [96] = 0
R12 = M [104] = 3
R14 = M[28] = -48
R15 = M[0] =77

	DADDI	R4 ,R0, #222	R4 = 222	8 0 4 222	
	DADDI	R3, R0, #0	R3 = 0	8 0 3 0	
	DSUB	R30, R30, R30	R30 = 0	34 30 30 30	
	DSUB	R10, R10, R10	R10 = 0	34 10 10 10	
	DADDI	R25, R0, #72	R25 = 72	8 0 25 72	
	DADDI	R8, R0, #8	R8 = 8	8 0 8 8	
ETI	LW	R5, 0(R25)	R5 = M[R25] = **-48** y **-48**	35 25 5 0	
	LW	R6, 4 (R25)	R6 = M[R25 + 4] = **-48** y **55**	35 25 6 4	
	DADD	R3, R5, R6	R3 = R5 + R6 = **-96** y **7**	32 5 6 3	
	DADD	R30, R30, R3	R30 += R3 = **-96 y -185**	32 30 3 30	
	SW	R4 , 0(R25)	M[R25] = M[72] = **222** y M[88] = **222**	43 25 4 0	
	SW	R4, 4 (R25)	M[R25 + 4] = M[76] = **222** y M[92] = **222**	43 25 4 4	
	LW	R5, 8(R25)	R5 = M[R25+8] = M[80]= **-48** y R5 = M[96] = **0**	35 25 5 8	
	LW	R6, 12(R25)	R6 = M[R25 + 12] = **-48 y 99**	35 25 6 12	**4**
	DADD	R10, R5, R6	R10 = R5 + R6 = **-96 y 99**	32 5 6 10	
	SW	R4 , 8(R25)	M[R25 +8] = M[80] = **222** y M[96] = **222**	43 25 4 8	
	SW	R4, 12(R25)	M[R25 + 12] = M[84] = **222** y M[100] = **222**	43 25 4 12	
	DADD	R30, R30, R10	R30 += R10 = **-192** y **-86**	32 30 10 30	
	DADDI	R8, R8, # -4	R8 -= 4	8 8 8 -4	
	DADDI	R25, R25, # 16	R25 += 16 = **104**	8 25 25 16	
	BNEZ	R8, **ETI**	Salta 1 vez	**5 8 0 -15**	
	SW	R30, 20(R0)	**M[20] = R30 = -86**	43 0 30 20	
	BEQZ	R8, **END**	SALTA	4 8 0 1	
	SW	R25, 24 (R0)	**NO SE DEBE EJECUTAR**	43 0 25 24	
END	DADDI	R31, R0, #44	R31 = 44	8 0 31 44	
	SW	R31, 28 (R0)	M[28] = 44	43 0 31 28	
	LW	R11, 100 (R0)	R11 = M [100] = **222**	35 0 11 100	
	LW	R12 , 0 (R0)	R12 = M [0] = 77	35 0 12 0	
	LW	R13, 104(R0)	R13= M [104] = 3	35 0 13 104	
	LW	R15, 120 (R0)	R15 = M[120] = 3	35 0 15 120	
	FIN		FINALIZA	63 0 0 0	

r25	**72**	**88**
r8	**8**	**4**
r5	-48	-48
r6	-48	55
r3	-96	7
r30	-96	-185

Se guarda un **222** en posiciones de memoria:

	72	**88**
	76	**92**
r5	-48	0
r6	-48	99
r10	-96	99
	80	**96**
	84	**100**
r30	-192	-86
r25	88	104
r8	4	0

M[20] = R30 = -86
R31 = 44
M[28] = R31= **44**
R11= M[100] = **222**
R12= M[0] = **77**
R13= M[104] = **3**
R15= M[120] = **3**

Al fin del hilo 1

	Caché P0			
posición	0	1	2	3
pal-0	15	15	0	0
pal-1	15	15	99	0
pal-2	15	15	0	0
pal-3	15	15	0	0
etiq	0	1	6	7
Estado	C	C	M	C

Sección Mem Compartida en P0					
0	0	15	4	64	15
	4	15		68	15
	8	15		72	15
	12	15		76	15
1	16	15	5	80	15
	20	15		84	15
	24	15		88	15
	28	15		92	15
2	32	15	6	96	0
	36	15		100	0
	40	15		104	0
	44	15		108	0
3	48	15	7	112	0
	52	15		116	0
	56	15		120	0
	60	15		124	0

se guarda un **15** en esas direcciones de memo

r2 **0** 16 32 48 64 80

r4 **24** 20 16 12 8 4

0	16	32	48	64	80
4	20	36	52	68	84
8	24	40	56	72	88
12	28	44	60	76	92

r4 20 16 12 8 4 0

M[100] = 99
R13= M [92] =15
R12 = M [0] = 15
R14 = M[28] = 15
R15 = M[120] = 0
R15 = M[120] = 0

R0	0
R1	15
R2	96
R3	0
R4	4
R5	0
R6	0
R7	0
R8	0
R9	0
R10	0
R11	0
R12	15
R13	15
R14	15
R15	0
R16	0
R17	0
R18	0
R19	0
R20	0
R21	0
R22	0
R23	0
R24	0
R25	0
R26	0
R27	0
R28	0
R20	0
R30	0
R31	99

Al fin de hilo 2, así que corrió el 1

	Caché P0			
posición	0	1	2	3
pal-0	77	-48	0	0
pal-1	15	-48	99	0
pal-2	15	-48	0	0
pal-3	-48	-48	0	0
etiq	0	1	6	7
Estado	M	M	C	C

Sección Mem Compartida en P0					
0	0	15	4	64	-48
	4	15		68	-48
	8	15		72	-48
	12	15		76	-48
1	16	15	5	80	-48
	20	15		84	-48
	24	15		88	-48
	28	15		92	15
2	32	-48	6	96	0
	36	-48		100	99
	40	-48		104	0
	44	-48		108	0
3	48	-48	7	112	0
	52	-48		116	0
	56	-48		120	0
	60	-48		124	0

se guarda un **-48** en estas dir de mem

88	72	56	40	24
84	68	52	36	20
80	64	48	32	16
76	60	44	28	12

77 en pal 0 de bloque 0

R13, 92(R0) 15
R11 , 100 (R0) 99
R14, 28(R0) -48
R15, 120 (R0) 0

R0	0
R1	0
R2	-48
R3	0
R4	5
R5	0
R6	0
R7	0
R8	0
R9	0
R10	0
R11	99
R12	0
R13	15
R14	-48
R15	0
R16	8
R17	0
R18	0
R19	0
R20	0
R21	0
R22	0
R23	0
R24	0
R25	0
R26	0
R27	0
R28	0
R20	0
R30	0
R31	77

Al fin de hilo 3, así que corrieron el 1 y 2

Caché P0				
posición	**0**	**1**	**2**	**3**
pal-0	**77**	**-48**	**0**	**3**
pal-1	**15**	**-48**	**99**	**3**
pal-2	**15**	**-48**	**3**	**3**
pal-3	**-48**	**-48**	**3**	**3**
etiq	**0**	**1**	**6**	**7**
Estado	**M**	**C**	**M**	**M**

Sección Mem Compartida en P0					
0	**0**	**15**	**4**	**64**	**-48**
	4	**15**		**68**	**-48**
	8	**15**		**72**	**-48**
	12	**15**		**76**	**-48**
1	**16**	**-48**	**5**	**80**	**-48**
	20	**-48**		**84**	**-48**
	24	**-48**		**88**	**-48**
	28	**-48**		**92**	**55**
2	**32**	**-48**	**6**	**96**	**0**
	36	**-48**		**100**	**99**
	40	**-48**		**104**	**0**
	44	**-48**		**108**	**0**
3	**48**	**-48**	**7**	**112**	**0**
	52	**-48**		**116**	**0**
	56	**-48**		**120**	**0**
	60	**-48**		**124**	**0**

se guarda el valor **3** en esas dir de mem

r24	104	112	120
r28	15	10	5
	104	**112**	**120**
	108	**116**	**124**
r24	112	120	128
r28	10	5	0

M[92]= **55**

R11 = M [96] = 0
R12 = M [104] = 3
R14 = M[28] = -48
R15 = M[0] =77

R0	0
R1	0
R2	0
R3	**3**
R4	**4**
R5	**0**
R6	0
R7	0
R8	0
R9	0
R10	0
R11	**0**
R12	**3**
R13	0
R14	**-48**
R15	**77**
R16	0
R17	0
R18	0
R19	0
R20	0
R21	0
R22	0
R23	0
R24	**128**
R25	0
R26	0
R27	0
R28	**0**
R20	0
R30	0
R31	**55**

Al fin de hilo 4, así que corrieron el 1, 2 y 3

Caché P1				
posición	**0**	**1**	**2**	**3**
pal-0	**77**	**-48**	**222**	**3**
pal-1	**15**	**-86**	**222**	**3**
pal-2	**15**	**-48**	**3**	**3**
pal-3	**-48**	**44**	**3**	**3**
etiq	**0**	**1**	**6**	**7**
Estado	**C**	**M**	**M**	**M**

Sección Mem Compartida en P0					
0	**0**	**77**	**4**	**64**	**-48**
	4	**15**		**68**	**-48**
	8	**15**		**72**	**222**
	12	**-48**		**76**	**222**
1	**16**	**-48**	**5**	**80**	**222**
	20	**-48**		**84**	**222**
	24	**-48**		**88**	**222**
	28	**-48**		**92**	**222**
2	**32**	**-48**	**6**	**96**	**0**
	36	**-48**		**100**	**99**
	40	**-48**		**104**	**0**
	44	**-48**		**108**	**0**
3	**48**	**-48**	**7**	**112**	**0**
	52	**-48**		**116**	**0**
	56	**-48**		**120**	**0**
	60	**-48**		**124**	**0**

r25	**72**	**88**
r8	**8**	**4**
r5	-48	-48
r6	-48	55
r3	-96	7
r30	-96	-185

Se guarda un **222** en posiciones de memo

	72	**88**
	76	**92**
r5	-48	0
r6	-48	99
r10	-96	99
	80	**96**
	84	**100**
r30	-192	-86
r25	88	104
r8	4	0

M[20] = R30 = -86
R31 = 44
M[28] = R31= **44**
R11= M[100] = **222**
R12= M[0] = **77**
R13= M[104] = **3**
R15= M[120] = **3**

R0	0
R1	0
R2	0
R3	**7**
R4	**222**
R5	**0**
R6	**99**
R7	0
R8	**0**
R9	0
R10	**99**
R11	**222**
R12	**77**
R13	**3**
R14	0
R15	**3**
R16	0
R17	0
R18	0
R19	0
R20	0
R21	0
R22	0
R23	0
R24	0
R25	**104**
R26	0
R27	0
R28	0
R20	0
R30	**-86**
R31	**44**