

## Test Cases

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1:16 PM

### Test initialization

### Test special cases (Unconditional, etc.)

### Test choice prediction

- Make the local and global prediction different, predict from local, then cause predict from global

### Test Local prediction

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### Indirect unused

Always taken - call, return, unconditional

### Initial values - weakly taken

- Weakly global

Tests - global outcome	gl
local outcome	loc
selector outcome	sel
global saturation high	gl-H
global saturation low	gl-L
local saturation high	loc-H
local saturation low	loc-L
selector saturation high	sel-H
selector saturation low	sel-L
Special Case (Predict Taken)	SC
Path History Indexing	PH

Ref	Outcome	Selector	Path History	old local ctr	local new ctr	global old ctr	global new ctr	mis/collect	sel ctr	Test
1	A Uncond	—	000000000000	—	—	10	10	T	—	SC
2	B Call	—	000000000001	—	—	10	10	T	—	SC.
3	C Return	—	000000000011	—	—	10	10	T	—	S.C.
4	1 Taken	global	000000000111	100	101	10	11	T	wg	g1
5	2 Not	global	000000001111	100	011	10	01	T mis	wg	g1
6	3 Taken	global	000000011110	100	101	10	11	I	wg	g1

5	2	Not	global	000000001111	100	011	10	01	T	mis	wg	gl
6	3	Taken	global	000000011110	100	101	10	11	T		wg	gl
7	1	Taken	global	000000111101	101	110	10	11	T		wg	gl
8	2	Not	global	000001111011	011	010	10	01	T	mis	wg $\rightarrow$ w1	gl
9	4	Taken	global	000011110110	100	101	10	11	T		wg	gl
10	2	Not	global	000111101101	010	001	10	01	T	mis	wg $\rightarrow$ w1	gl
11	4	Taken	global	001111011010	101	110	10	11	T		wg	gl
12	2	Not	global	011110110101	001	000	10	01	T	mis	wg $\rightarrow$ w1	gl
13	3	Taken	global	111101101010	101	110	10	11	T		wg	gl
14	2	Not	global	111011010101	000	000	10	01	T	mis	wg $\rightarrow$ w1	gl / loc-H
15	3	Taken	global	110110101010	110	111	10	11	T		wg	gl
16	1	Taken	global	101101010101	110	111	10	11	T		wg	gl
17	1	Taken	global	011010101011	111	111	10	11	T		wg	gl / loc-H
18	1	Not	global	110101010111	111	110	10	01	T	mis	wg	gl
19	2	Taken	global	101010101110	000	001	10	11	T		wg $\rightarrow$ sg	gl
20	2	Not	global	010101011101	001	000	10	01	T	mis	wg $\rightarrow$ w1	gl
21	3	Taken	global	101010111010	111	111	10	11	T		wg	gl / loc-H
22	1	Not	global	010101110101	110	101	10	01	T	mis	wg	gl
23	2	Taken	global	101011101010	000	001	10	11	T		wg $\rightarrow$ sg	gl
24		Not	global	010111010101			10	01	T	mis		
25		Taken	global	101110101010			10	11	T			
26		Taken	global	011110101010			10	11	T			
27		Taken	global	111010101011			10	11	T			
28		Not	global	110101010111			01	00	N			PH
29		Taken	global	101010101110			11	11	T			gl / gl-H
30			global	010101011101			01					