ptr0.c

Only changes are shown. The empty cells means the values haven't changed.

line #	value of i at address: 3925435208	value of j at address: 3925435200	value of p at address: 3925435192	value of q at address: 3925435184	value of r at address: 3925435176
9	0	-369531856	4195344	4196848	0
14	33				
15			3925435208		
25		-369532088 (the signed value of a memory address)			
32	44				
38	5				
39			(no change)		
40				3925435208	
41					3925435184

Output:

1. *p is 33
2. 2**p is 66
3. p has 3925435208, &i is 3925435208
4. p has 3925435208 at addr 3925435192
5. *(int *)j is 33, j has 3925435208
6. (int *)j is 3925435208, j has -369532088
7. *p is 44
8. p has 3925435208 at its own addr 3925435192
9. i has 5 at addr 3925435208
10. p has 3925435208 at addr 3925435192
11. *p is 5
12. q has 3925435208 at addr 3925435184
13. *q is 5
14. r has 3925435184 at addr 3925435176
15. *r has 3925435208
16. **r has 5

---

ptr1.c

Only changes are shown. The mpty cells means the values haven't changed. Note: I skipped counter variables because they are only incremented and don't relate to pointers.

line #	value of x[0] at addr: 1291260608	value of x[1] at addr: 1291260612	value of x[2] at addr: 1291260616	value of x[3] at addr: 1291260620	value of x[4] at addr: 1291260624	value of x[5] at addr: 1291260628	value of x[6] at addr: 1291260632	value of x[7] at addr: 1291260636	value of x[8] at addr: 1291260640	value of x[9] at addr: 1291260644	value of p at addr: 1291260600	value of q at addr: 1291260592
40	41	52	63	74	85	96	107	118	119	120	N/a	N/a
42											4196749	1
46											1291260608	
47												1291260608
53												(no change)
54	10											
66	999											

Output:

1. 4
2.1. *x is 41, x is 1291260608
2.2. value of q is 1291260608, as addr q points at 41
3. value 52 x+1 is 1291260612
4. value 52 p+1 is 1291260612
5. value 52 q+1 is 1291260612
6. main: value 10 in addr 1291260608
6. main: value 52 in addr 1291260612
6. main: value 63 in addr 1291260616
6. main: value 74 in addr 1291260620
6. main: value 85 in addr 1291260624
6. main: value 96 in addr 1291260628
6. main: value 107 in addr 1291260632
6. main: value 118 in addr 1291260636
6. main: value 119 in addr 1291260640
6. main: value 120 in addr 1291260644
7. main: value 10 in addr 1291260608
7. main: value 52 in addr 1291260612
7. main: value 63 in addr 1291260616
7. main: value 74 in addr 1291260620
7. main: value 85 in addr 1291260624
7. main: value 96 in addr 1291260628
7. main: value 107 in addr 1291260632
7. main: value 118 in addr 1291260636
7. main: value 119 in addr 1291260640
7. main: value 120 in addr 1291260644
9. Sub1: value 10 in addr 1291260608
9. Sub1: value 52 in addr 1291260612
9. Sub1: value 63 in addr 1291260616
9. Sub1: value 74 in addr 1291260620
9. Sub1: value 85 in addr 1291260624
9. Sub1: value 96 in addr 1291260628

```
9. Sub1: value 107 in addr 1291260632
9. Sub1: value 118 in addr 1291260636
9. Sub1: value 119 in addr 1291260640
9. Sub1: value 120 in addr 1291260644
8. main: value 999 in addr 1291260608
8. main: value 52 in addr 1291260612
8. main: value 63 in addr 1291260616
8. main: value 74 in addr 1291260620
8. main: value 85 in addr 1291260624
8. main: value 96 in addr 1291260628
8. main: value 107 in addr 1291260632
8. main: value 118 in addr 1291260636
8. main: value 119 in addr 1291260640
8. main: value 120 in addr 1291260644
10. Sub2: value 999 in addr 1291260608
10. Sub2: value 52 in addr 1291260612
10. Sub2: value 63 in addr 1291260616
10. Sub2: value 74 in addr 1291260620
10. Sub2: value 85 in addr 1291260624
10. Sub2: value 96 in addr 1291260628
10. Sub2: value 107 in addr 1291260632
10. Sub2: value 118 in addr 1291260636
10. Sub2: value 119 in addr 1291260640
10. Sub2: value 120 in addr 1291260644
11. z[3] is 74
```

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ptr2.c

line #	value of i at addr: 1312346028	value of j at addr: 1312346024	value of p at addr: 1312346016	value of *p at addr: (see below for values)
23	0	0	1312346256	1 @(1312346256)
25	1		1312346028	1 @(1312346028)
28	(no change)			(no change)
30	2			2 @(1312346028)
33			(no change)	(no change)
36			**1312345996**	20 @(**1312345996**)
39		3	1312346024	3 @(1312346024)
42		30		30 @(1312346024)
45			(no change)	(no change)
48			1312345996	50 @(**1312345996**) Interesting... The same memory slot was used by both Change2() and Change5()... Recycling!

Output:

```
1. Before: *p=1  p=1312346028  &p=1312346016
2. Change0: *p=2  p=1312346028  &p=1312346016
3. Change1: *p=2  p=1312346028  &p=1312346016
4. Change2: *p=20  p=1312345996  &p=1312346016
5. Before: *p=3  p=1312346024  &p=1312346016
6. Change3: *p=30  p=1312346024  &p=1312346016
7. Change4: *p=30  p=1312346024  &p=1312346016
8. Change5: *p=50  p=1312345996  &p=1312346016
```