Example 01

t1 = uminus c
t2 = b * t1
t3 = uminus c
t4 = b * t3
t5 = t2 + t4
a = t5

	ор	arg1	arg2	result
0	uminus	С		t1
1	*	b	t1	t2
2	uminus	С		t3
3	*	b	t3	t4
4	+	t2	t4	t5
5	=	t5		а

Quadruples

Quadruples representation of three-address code

		op	arg1
t1 = uminus c	0	uminus	С
t2 = b * t1 t3 = uminus c t4 = b * t3 t5 = t2 + t4	1	*	b
	2	uminus	С
	3	*	b
a = t5	4	+	(1)
	5	=	а

Triples

arg2

(0)

(2)

(3)

(4)

Triples representation of three-address code

	ins	tructior	1	ор	arg1	arg2
t1 = uminus c	35	(0)	0	uminus	С	
t2 = b * t1 t3 = uminus c t4 = b * t3 t5 = t2 + t4 a = t5	36	(1)	1	*	b	(0)
	37	(2)	2	uminus	С	
	38	(3)	3	*	b	(2)
	39	(4)	4	+	(1)	(3)
	40	(5)	5	=	а	(4)

Indirect Triples

Indirect Triples representation of three-address code

Example 02

t0 = x * y		
t1 = t0 + w		
a[x] = 5		
param w		
param k		
call foo,2		

	ор	arg1	arg2	result
0	*	x	у	tO
1	+	tO	W	t1
2	=	5	X	а
3	param	w		
4	param	k		
5	call	foo	2	

Quadruples

Quadruples representation of three-address code

		ор	arg1	arg2
t0 = x * y	0	*	x	у
t1 = t0 + w $a[x] = 5$	1	+	(0)	w
param w	2	=	5	x
param k call foo,2	3	param	W	
Call 100,2	4	param	k	
	5	call	foo	2

Triples

Triples representation of three-address code

	ins	struction	n	ор	arg1	arg2
t0 = x * y t1 = t0 + w	25	(0)	0	*	x	у
	26	(1)	1	+	(0)	w
a[x] = 5 param w	27	(2)	2	=	5	x
param k	28	(3)	3	param	w	
call foo,2	29	(4)	4	param	k	
	30	(5)	5	call	foo	2

Indirect Triples

Indirect Triples representation of three-address code

Example 03

t1 = b * c		
t2 = a + t1		
t3 = b * c		
t4 = d / t3		
t5 = t2 - t4		

	ор	arg1	arg2	result
0	*	b	С	t1
1	+	а	t1	t2
2	*	b	С	t3
3	1	d	t3	t4
4	-	t2	t4	t5

Quadruples

Quadruples representation of three-address code

t1 = b * c	
t2 = a + t1	
t3 = b * c	
t4 = d / t3	
t5 = t2 - t4	

	ор	arg1	arg2
0	*	b	С
1	+	а	(0)
2	*	b	С
3	1	d	(2)
4	-	(1)	(3)

Triples

Triples representation of three-address code

t1 = b * c	
t2 = a + t1	
t3 = b * c	
t4 = d / t3	
t5 = t2 - t4	

instruction		ор	arg1	arg2	
35	(0)	0	*	b	С
36	(1)	1	+	а	(0)
37	(2)	2	*	b	С
38	(3)	3	1	d	(2)
39	(4)	4	-	(1)	(3)

Indirect Triples

Indirect Triples representation of three-address code