

Implementation of three address code:

- i) Quadruples
- ii) Triples
- iii) Indirect triples

Quadruples:

Op args1 args2 result

$x = y \text{ op } z$

Eg: $a = b * -c + b * -c$

$x = \text{Op } y$ y No args2

$t_1 = \text{uminus } c$

$t_2 = b * t_1$

Param. $x \Rightarrow$ No args2 result

$t_3 = \text{uminus } c$

$L = \text{result}$

$t_4 = b * t_3$

$t_5 = t_2 + t_4$

$a = t_5$

Op args1 args2 result

(1) uminus

c

t_1

(2) $*$

b

t_1

t_2

(3) uminus

c

t_3

(4) $*$

b

t_3

t_4

(5) $+$

t_2

t_4

t_5

(6) $=$

t_5

a

Triples:

OP arg1 arg2

	OP	arg1	arg2
(0)	Arminius	c	
(1)	*	b	(0)
(2)	Arminius	c	
(3)	*	b	(2)
(4)	+	(0) (1)	(3)
(5)	=	(4) a	(4)

Indirect Triples

		OP	arg1	arg2
(0)	(40)	Arminius	c	
(1)	(41)	*	b	40
(2)	(42)	Arminius	c	
(3)	(43)	*	b	42
(4)	(44)	+	41	43
(5)	(45)	=	44	