

BitVector<b-a, a-b>

Tabella 1

	VERY BUSY EXPRESSIONS
Domain	Sets of expressions
Direction	Backward: $in[b] = Fb(out[b])$ $out[b] = \wedge in[succ[b]]$
Transfer function	$Fb = Gen[b] \cup (out[b] - kill[b])$
Meet Opeeration (^)	\cap
Boundary Condition	$in[exit] = \emptyset$
Initial interior points	$in[b] = \emptyset$

Tabella 2

	Iterazione 1		Iterazione 2 (inutile)	
	IN[B]	OUT[B]	IN[B]	OUT[B]
BB1	\emptyset	\emptyset		
BB2	\emptyset	1 0		
BB3	1 1	0 1		
BB4	0 1	\emptyset		
BB5	1 0	\emptyset		
BB6	\emptyset	0 1		
BB7	0 1	\emptyset		
BB8	\emptyset	\emptyset		

Tabella 1

	Dominator Analysis
Domain	Sets of nodes (BB)
Direction	Forward: $Out[n] = Fb[n]$ $In[n] = \wedge Out[pred[n]]$
Transfer function	$Fb[n] = In[n] \cup \{n\}$
Meet Operation (\wedge)	\cap
Boundary Condition	$in[entry] = entry$
Initial interior points	$in[n] = \text{universal set}$

A B C D E F G =
 1 2 3 4 5 6 7

Tabella 2

	Iterazione 1	
	IN[N]	OUT[N]
BB1	1 0 0 0 0 0 0	1 0 0 0 0 0 0
BB2	1 0 0 0 0 0 0	1 1 0 0 0 0 0
BB3	1 0 0 0 0 0 0	1 0 1 0 0 0 0
BB4	1 0 1 0 0 0 0	1 0 1 1 0 0 0
BB5	1 0 1 0 0 0 0	1 0 1 0 1 0 0
BB6	1 0 1 0 0 0 0	1 0 1 0 0 1 0
BB7	1 0 0 0 0 0 0	1 0 0 0 0 0 1

Bitvector <k, a, x, b, y>

Tabella 1

	Iterazione 1		Iterazione 2	
	In[b]	Out[b]	In[b]	Out[b]
BB1	∅	∅	∅	∅
BB2	∅	1 0 0 0 0 k=2	∅	1 0 0 0 0 k=2
BB3	1 0 0 0 0	1 0 0 0 0 k=2	1 0 0 0 0	1 0 0 0 0 k=2
BB4(k+2)	1 0 0 0 0	1 1 0 0 0 k=2, a=4	1 0 0 0 0	1 1 0 0 0 k=2, a=4
BB5(k*2)	1 0 0 0 0	1 1 0 0 0 k=2,a=4	1 0 0 0 0	1 1 0 0 0 k=2,a=4
BB6(x=5)	1 1 0 0 0	1 1 1 0 0 k=2, a=4, x=5	1 1 0 0 0	1 1 1 0 0 k=2, a=4, x=5
BB7(x=8)	1 1 0 0 0	1 1 1 0 0 k=2, a=4,x=8	1 1 0 0 0	1 1 1 0 0 k=2, a=4,x=8
BB8	1 1 0 0 0	1 1 0 0 0 k=4, a =4	1 1 0 0 0	1 1 0 0 0 k=4, a =4
BB9	1 1 0 0 0	1 1 0 0 0	0 1 0 0 0	0 1 0 0 0 a=4
BB10	1 1 0 1 0	1 1 0 1 0 k=4, a=4, b=2	0 1 0 0 0	0 1 0 1 0 a=4,b=2
BB11	1 1 0 1 0	1 1 1 1 0 k=4,a=4,x=8,b=2	0 1 0 1 0	0 1 0 1 0 a=4,b=2
BB12	1 1 1 1 0	1 1 1 1 1 k=4,a=4,x=8,b=2, y=8	0 1 0 1 0	0 1 0 1 1 a=4,b=2,y=8
BB13	1 1 1 1 1	1 1 1 1 1 k=5, a=4,x=8,b=2, y=8	0 1 0 1 1	0 1 0 1 1 a=4,b=2,y=8
BB14(print)	1 1 0 0 0	1 1 0 0 0 k=4, a=4	0 1 0 0 0	0 1 0 0 0 a=4
BB15	1 1 0 0 0	1 1 0 0 0	0 1 0 0 0	0 1 0 0 0 a=4

Tabella 1-1

	Constant propagation
Domain	set of variables
Direction	Forward: Out[b] = Fb[b] In[b] = ^Out[pred[b]]
Transfer function	Fb[b] = gen[b] ∪ (In[b] - kill[b])
Meet Opeeration (^)	∩
Boundary Condition	in[entry] = ∅
Initial interior points	Out[b] = universal set