

1a
 $B1 \rightarrow B3 : B3, B1$
 $B4 \rightarrow B2 : B2, B4$
 $B4 \rightarrow B1 : B1, B3, B2, B4$
1b
 $gen[B1] = \{1, 2, 3, 4\}$
 $kill[B1] = \{1, 6, 7, 9\}$
 $gen[B2] = \{5, 6\}$
 $kill[B2] = \{4, 7\}$
 $gen[B3] = \{7\}$
 $kill[B3] = \{4, 6\}$
 $gen[B4] = \{8, 9\}$
 $kill[B4] = \{1, 3\}$
1c

Block B	Initial		Pass 1	
	$in[B]$	$out[B]$	$in[B]$	$out[B]$
B1	0 0000 0000	0 0000 0000	0 0000 0000	0 0000 0000
B2	0 0000 0000	0 0000 0000	0 0000 0000	0 0000 0000
B3	0 0000 0000	0 0000 0000	0 0000 0000	0 0000 0000
B4	0 0000 0000	0 0000 0000	0 0000 0000	0 0000 0000