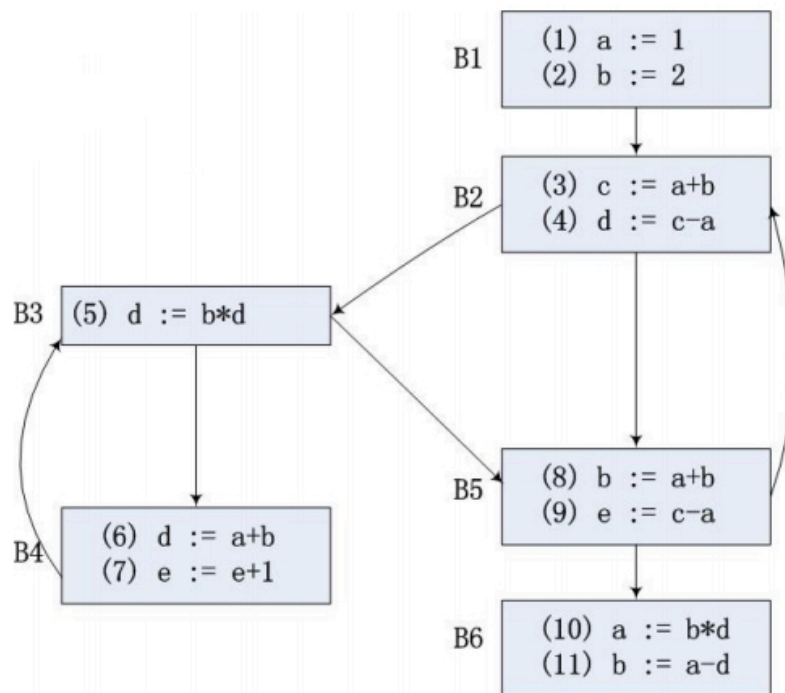


# 编译原理作业 18

张磊 2017K8009922027

## 题目

对下面的流图，计算：



(a) ud链和du链

UD-Chains:

Used Variable	definitions
(3, a)	{1}
(3, b)	{2, 8}
(4, c)	{3}
(4, a)	{1}
(5, b)	{2, 8}
(5, d)	{4, 6}
(6, a)	{1}
(6, b)	{2, 8}
(7, e)	{7, 9}
(8, a)	{1}
(8, b)	{2, 8}
(9, c)	{3}
(9, a)	{1}
(10, b)	{8}
(10, d)	{4, 5}
(11, a)	{1}
(11, d)	{4, 5}

**DU-Chains:**

Definition	Used
(1, a)	{3, 4, 6, 8, 9, 11}
(2, b)	{3, 5, 6, 8}
(3, c)	{4, 9}
(4, d)	{5, 10, 11}
(5, d)	{10, 11}
(6, d)	{5}
(7, e)	{7}
(8, b)	{3, 5, 6, 10}
(9, e)	{7}
(10, a)	{11}
(11, b)	{}

**(b) 每块末尾的活跃变量**

Block	Variables
B1	{a, b}
B2	{a, b, c, d}
B3	{b, d}
B4	{a, b, d, e}
B5	{a, b, c, e}
B6	{}

**(c) 可用表达式**

Point	Avilable Expressions
1	$\{\}$
2	$\{1\}$
3	$\{1\}$
4	$\{1, 3\}$
5	$\{\}$
6	$\{1\}$
7	$\{\}$
8	$\{1\}$
9	$\{1, 3\}$
10	$\{8\}$
11	$\{1\}$