

2. 程序流图:

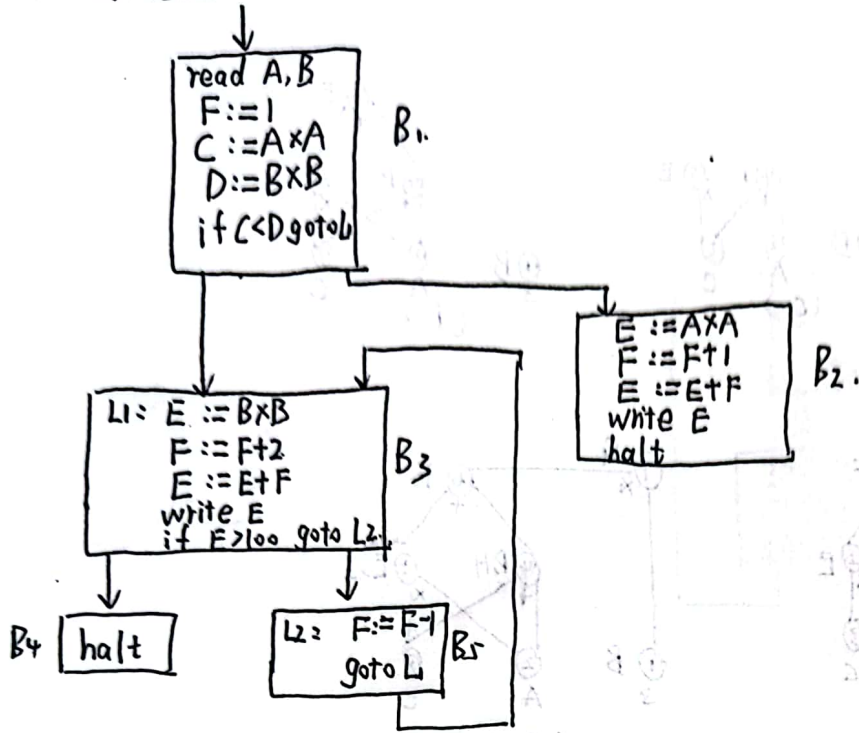


图 1 程序流图

$D = A + C$
 $E = A \times C$
 $F = D + E$
 $L = F + 12$

图 2 程序流图

$D = A + C$
 $E = A \times C$
 $F = D + E$
 $G = 3 \times F$
 $L = 12 + F$
 $V = L$



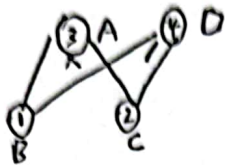
3. B_1 : ① $A := B \times C$ ② $D := B / C$ ③ $E := A + D$ ④ $F := 2 \times E$ ⑤ $G := B \times C$ ⑥ $H := G \times G$ ⑦ $F := H \times G$ ⑧ $L := F$ ⑨ $M := L$

我们按照 DAG 的构造方式进行构造

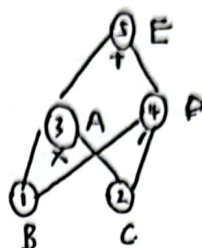
(a)



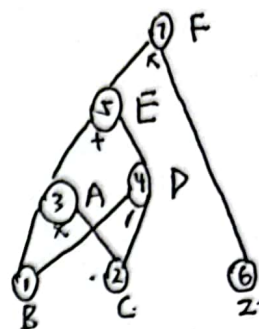
(b)



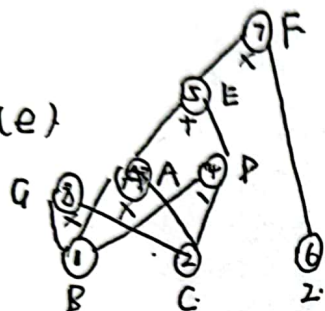
(c)



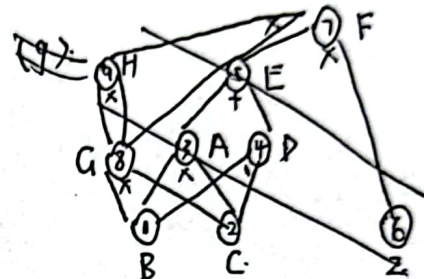
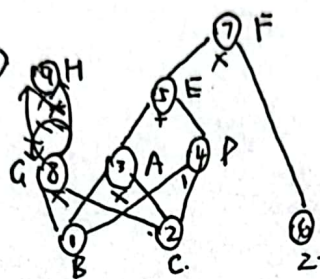
(d)



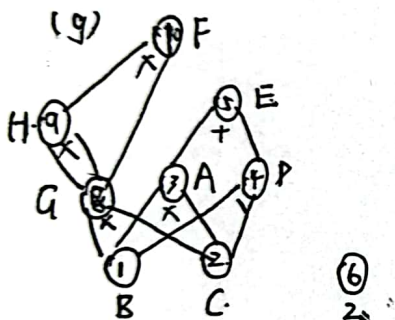
(e)



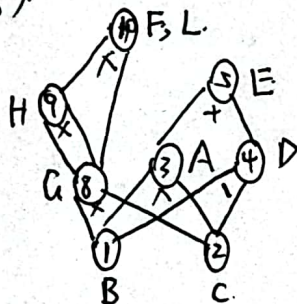
(f)



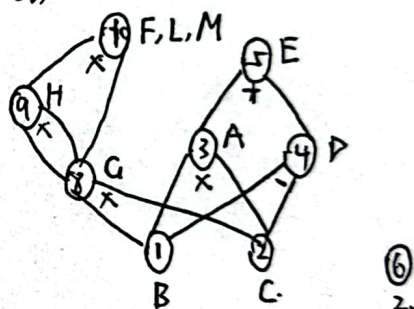
(g)



(h)



(i)



(1) 只有 G, L, M 后面还被引用

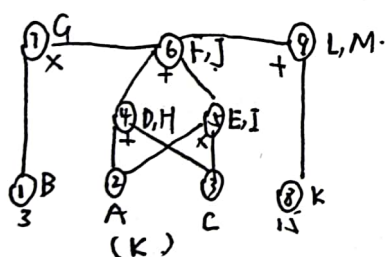
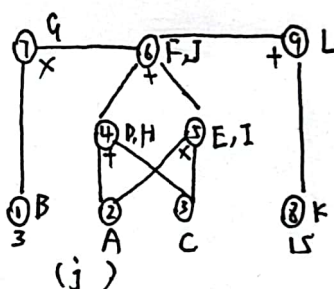
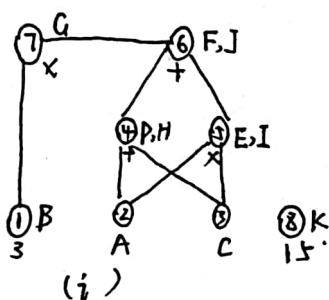
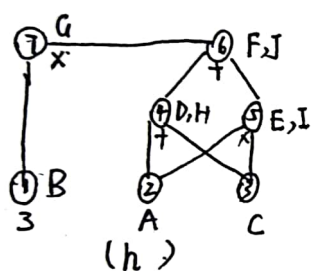
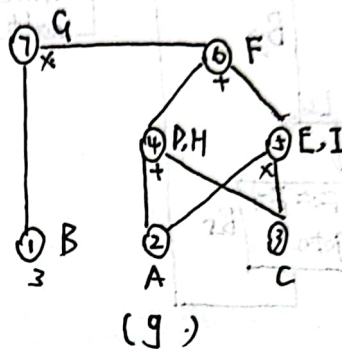
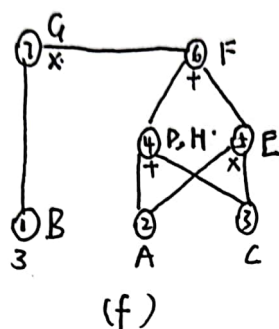
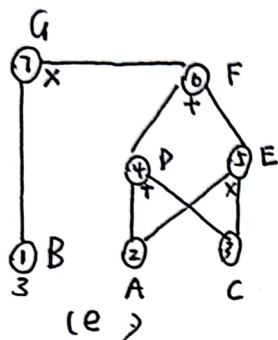
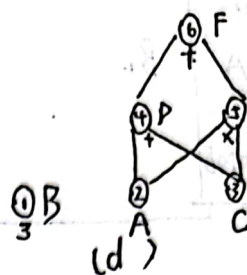
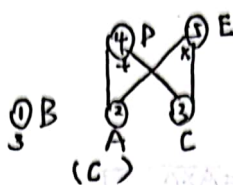
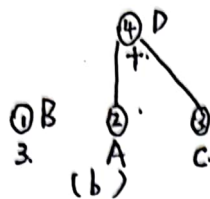
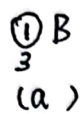
 $G := B \times C$ $H := G \times G$ $L := H \times G$ $M := L$

(2) 只有 L 后面还被引用

 $G := B \times C$ $H := G \times G$ $L := H \times G$ 

3. B2.

B2构造 DAG 的过程如下:



11) 只有 G, L, M 之后被引用

$$\begin{aligned} D &= A + C \\ E &= A \times C \\ F &= D + E \\ G &= 3 \times F \\ L &= 15 + F \\ M &= L \end{aligned}$$

12) 只有 L 之后被引用

$$\begin{aligned} D &= A + C \\ E &= A \times C \\ F &= D + E \\ L &= F + 15 \end{aligned}$$



5. 首先我们画出有原程序的程序流程图.

经过代码外提与强度削弱之后.

