

11.1

```

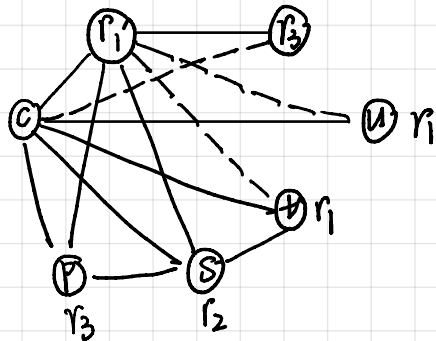
f:  $C \leftarrow r_3$ 
 $P \leftarrow r_1$ 
if  $P=0$  goto  $L_1$ 
 $r_1 \leftarrow M[P]$ 
call f
 $S \leftarrow r_1$ 
 $r_1 \leftarrow M[P+4]$ 
call f
 $t \leftarrow r_1$ 
 $u \leftarrow S+t$ 
goto  $L_2$ 

```

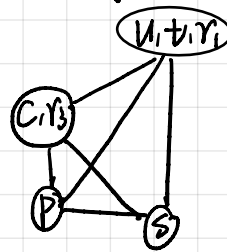
```

 $L_1: u \leftarrow 1$ 
 $L_2: r_1 \leftarrow u$ 
 $r_3 \leftarrow C$ 
return

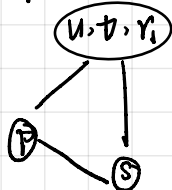
```



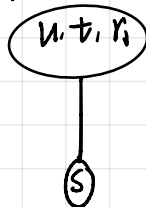
Step 1: use George. 合并  $r_3$  到  $C$ ;  $u+t$  到  $r_1$



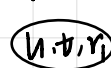
Step 2: 溢出 C



Step 3: 简化 P



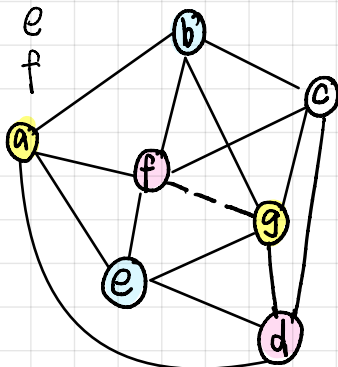
Step 4: 简化 S



11.3

a. select-stack:

- ① d 潜在溢出
- ② c
- ③ g
- ④ a
- ⑤ b
- ⑥ e
- ⑦ f

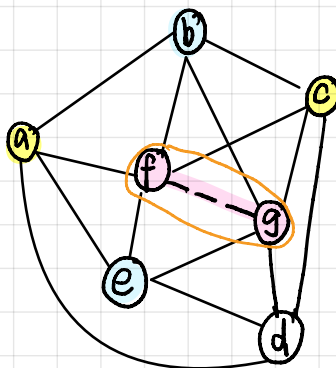


有潜在溢出, 无实际溢出

b. select-stack

合并 fg

- ① d
- ② c
- ③ fg
- ④ a
- ⑤ b
- ⑥ e



无潜在溢出, 无实际溢出