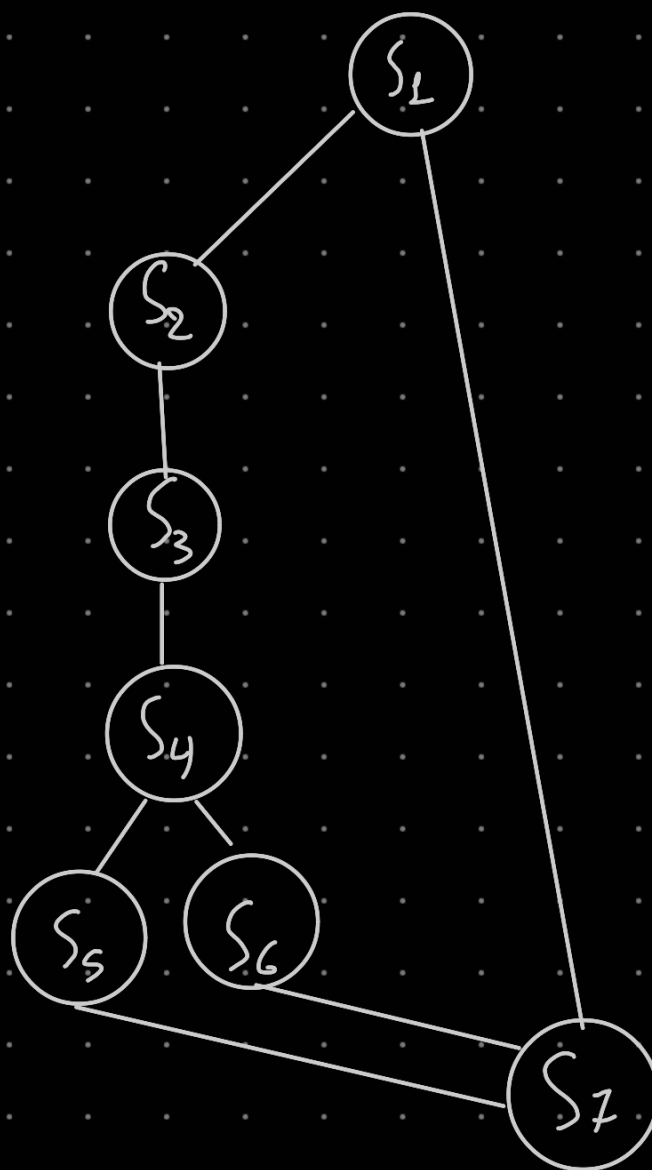


a) S1: E1
S2: E2,E3,E4,E5
S3: E6
S4: E7,E8
S5: E9,E10
S6: E11
S7: E12



b) S2 can be executed after S1 completes.
S3 can be executed after S2 completes.
S4 can be executed after S3 completes.
S5 and S6 can be executed after S4 completes.
S7 can be executed after S1, S5 and S6 completes.

```
8) var T2,T3,T4,T5,T6,T7: semaphores;  
   T2=0; T3=0; T4=0; T5=0; T6=0; T7=0;  
   cobegin  
     begin S1; signal(T2); signal(T7); end;  
     begin wait(T2); S2; signal(T3); end;  
     begin wait(T3); S3; signal(T4); end;  
     begin wait(T4); S4; signal(T5); signal(T6); end;  
     begin wait(T5); S5; end;  
     begin wait(T6); S6; end;  
     begin wait(T7); S7; end;  
   coend
```