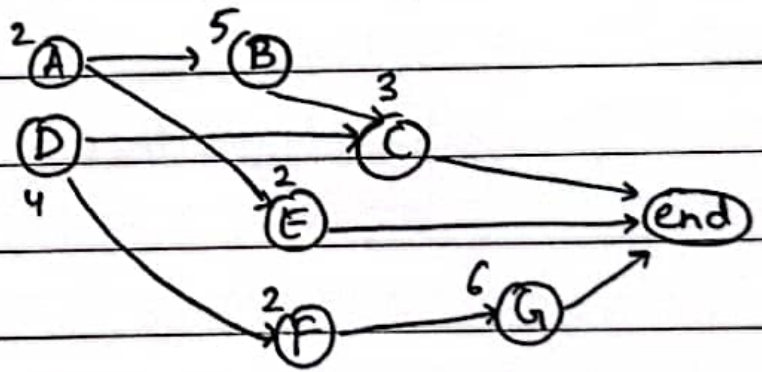


Task	Dependency	Duration	Cost
A	-	2	\$100
B	A	5	\$250
C	B, D	3	\$250
D	-	4	\$700
E	A	2	\$300
F	D	2	\$150
G	F, <del>E</del>	6	\$150

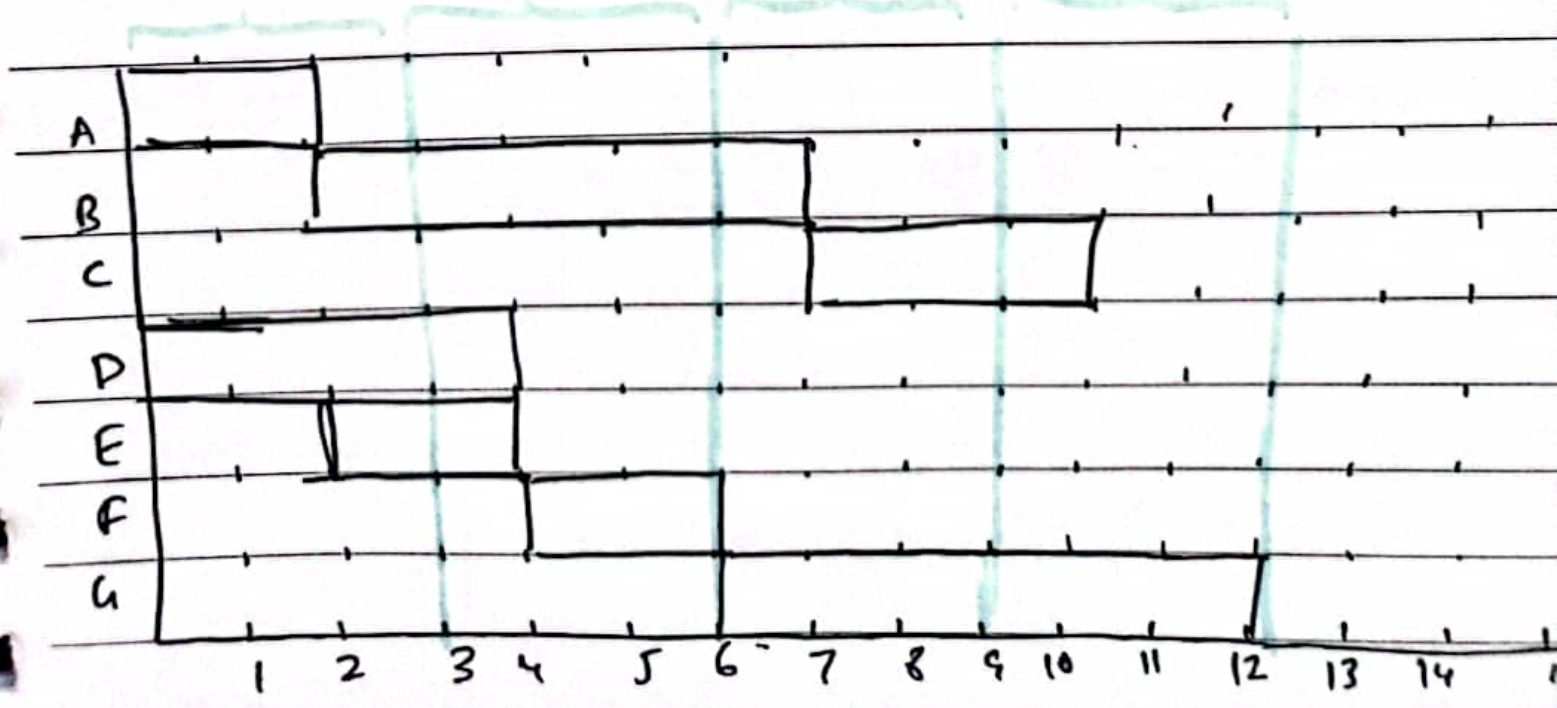
$\leq \$2000$

Gantt chart

Network diagram



monitoring periods (3 days each)



## Resource exercise

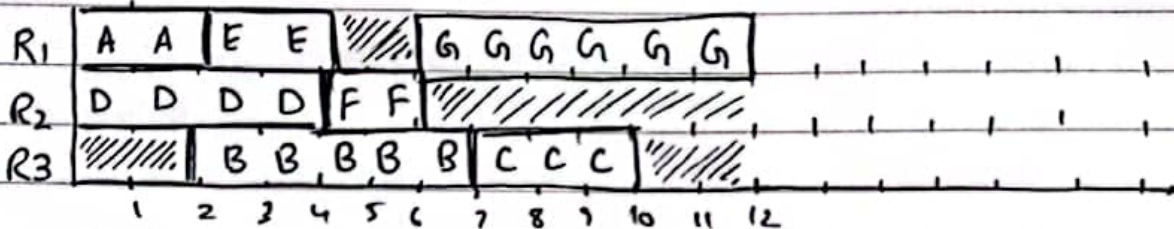
① → without considering skill level:

Squash the Gantt chart

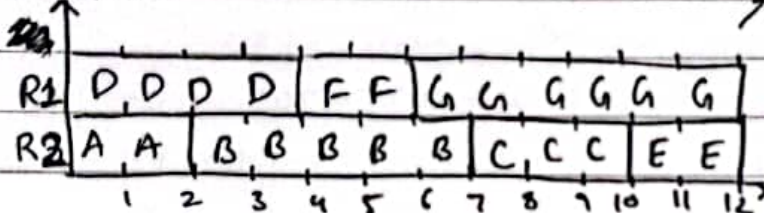
Max no of tasks in parallel @ any point in time = 3

⇒ max resources = 3

Assumption: any resource can do any task



Better:



cannot level @ cost of increasing time.  
Perfectly leveled. Yay.

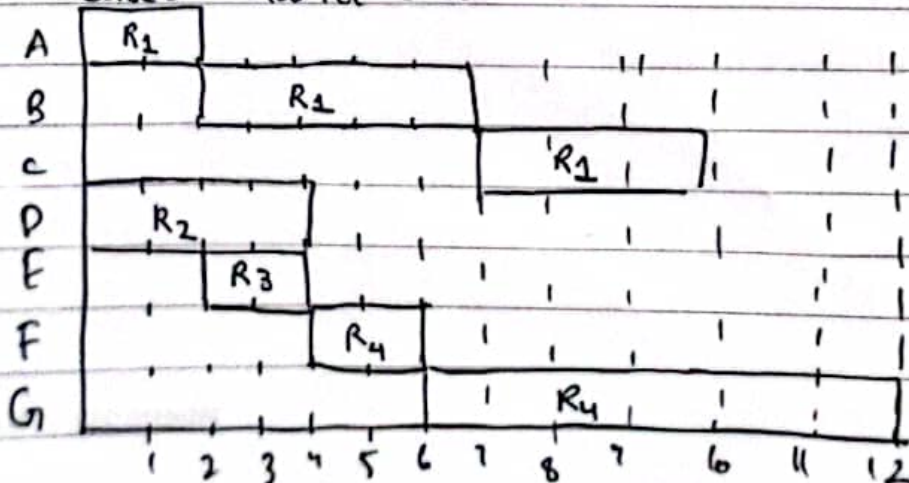
In this case the dependencies allowed us to level 100% but not always the case.

② → with consideration of skill level:

Suppose given skill levels

A, B	R <sub>1</sub> , R <sub>2</sub>
C	R <sub>1</sub>
D	R <sub>2</sub> , R <sub>1</sub>
E, F	R <sub>2</sub> , R <sub>3</sub> , R <sub>4</sub>
G	R <sub>4</sub>

Revised Gantt chart



← locked, only R<sub>1</sub> can do

\* can be done by R<sub>4</sub> too

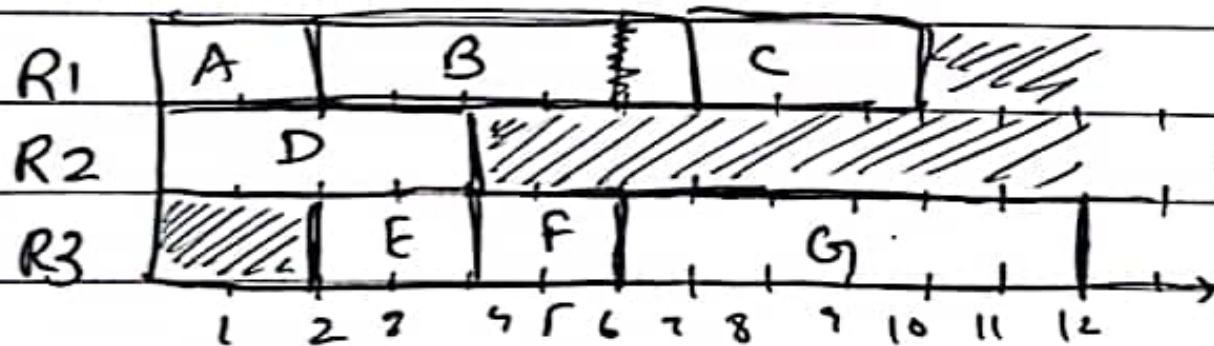
\* F can be done by R<sub>2</sub> or R<sub>4</sub>

← locked, only R<sub>4</sub> can do

one possible solution

- Give task E to  $R_4$
- Free up  $R_2$  after he completes D.
- $R_1, R_4$  work equally through the project.

Revised Resource Histogram



→ supposing  $R_2$  can be assigned to a diff project after this