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	Project management		
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PIT STOP

During a formula one Grand Prix a car has to make a pit stop in order to refuel, change the 2 front wheels and clean the visor of the pilot's helmet.

The following table shows the tasks list and the amount of time needed to complete each of the tasks.

Task Id.	Task	Amount of time (s)
A	Put the old wheels away	10
B	Bring the 2 wheels	8
C	Put on the front left wheel	8
D	Put on the front right wheel	8
E	Remove the front right wheel	5
F	Refuel	8
G	Remove the front left wheel	5
H	Clean the visor	6
I	Lower the car	2
J	Lift the car	2

NB: It's impossible to carry out tasks F and H if the car is in a raised position.

1. How long would the car remain in the pit if only one person did all the work?
2. Draw the corresponding Gantt chart (time scale: 1 s = 2 mm).
3. What would be the minimum amount of time a car would have to remain in the pit if the team had every necessary resource? To answer the question, draw the corresponding Gantt chart.
4. How many people would you need for a minimum stay in the pit?
5. What are the decisive tasks (those for which any delay would slow down the project as a whole)?

Work in pairs and hand in both charts to your teacher.