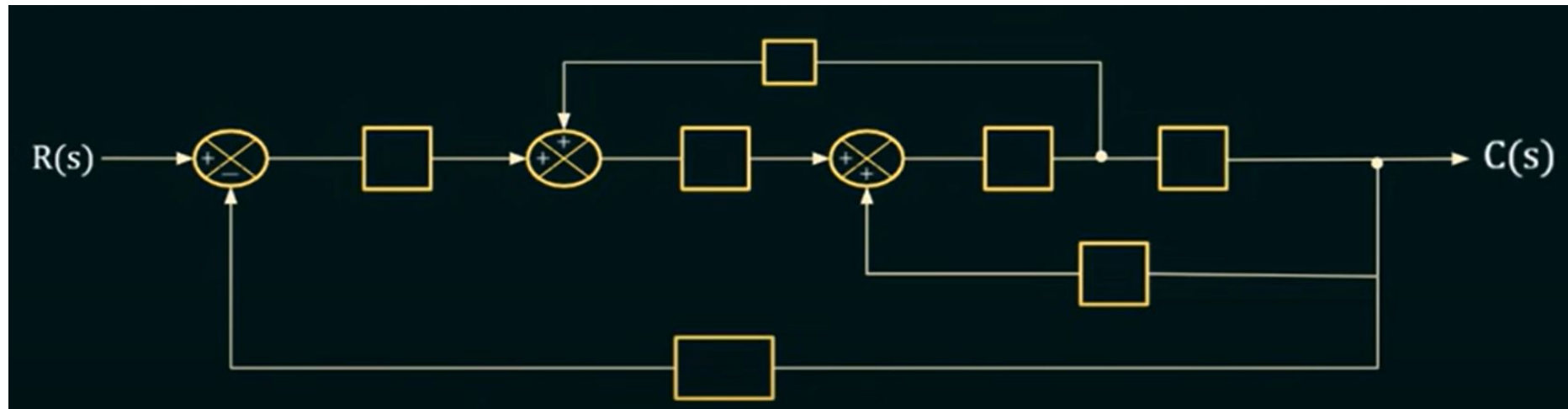


Introduction to Robotics

CSE 461

Class 11: Introduction to Control System Theory

Riad Ahmed
Lecturer
Brac University

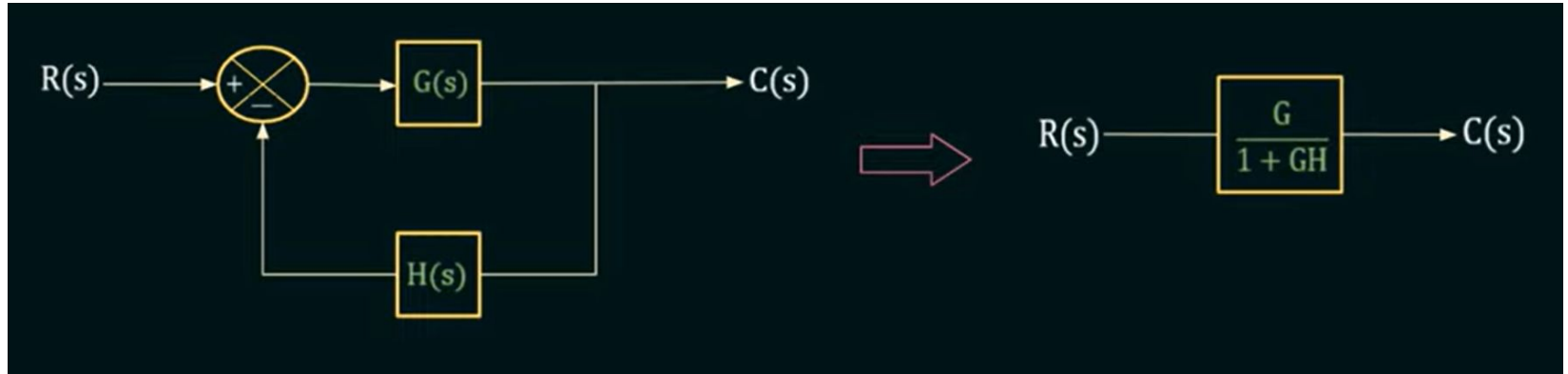


Block Diagram Solving

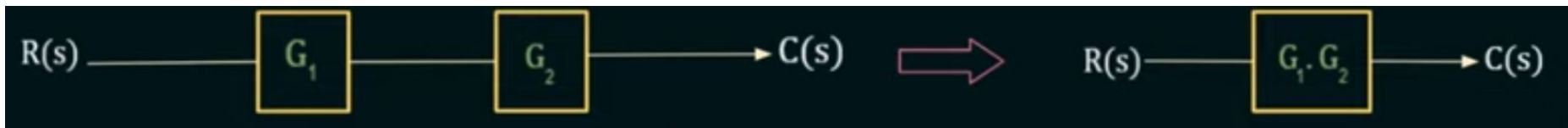
Summing Point



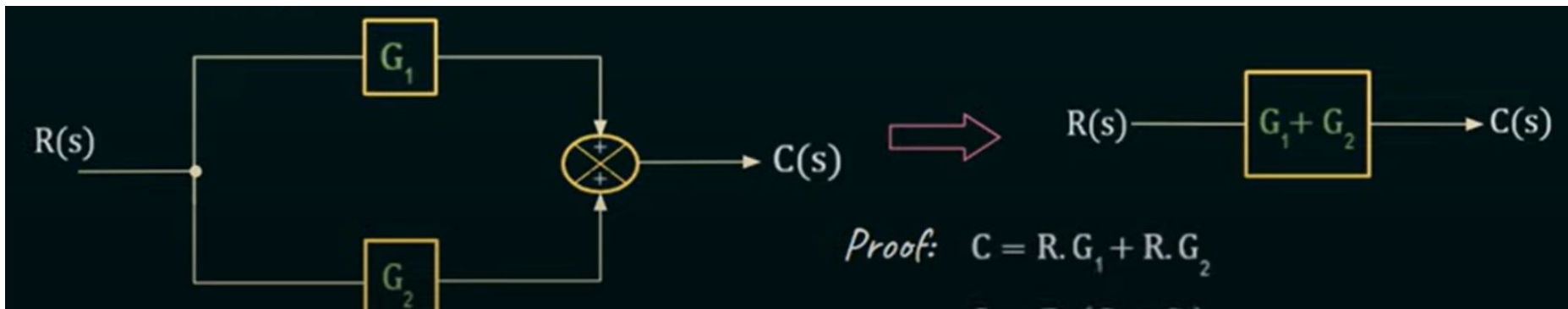
Rule : 1



Rule : 2



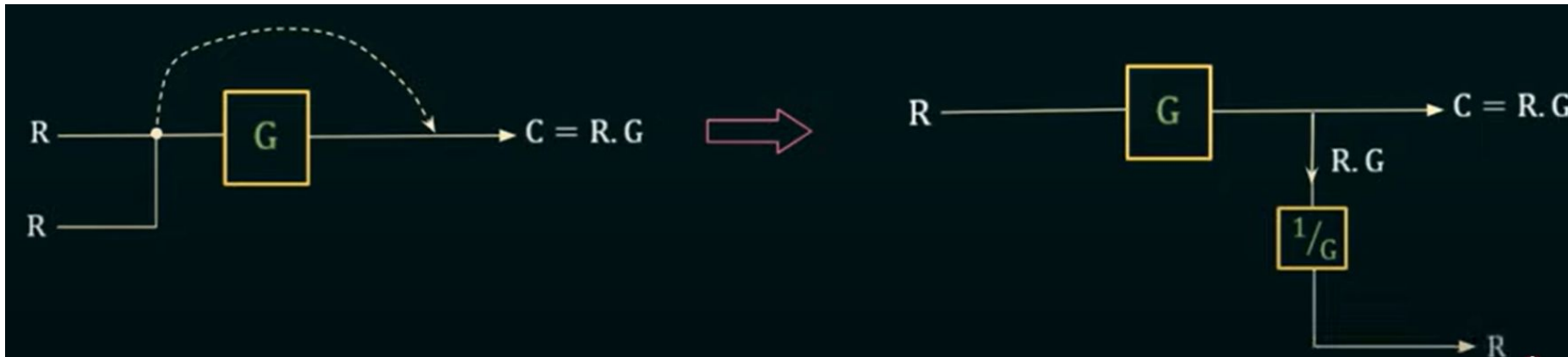
Rule : 3



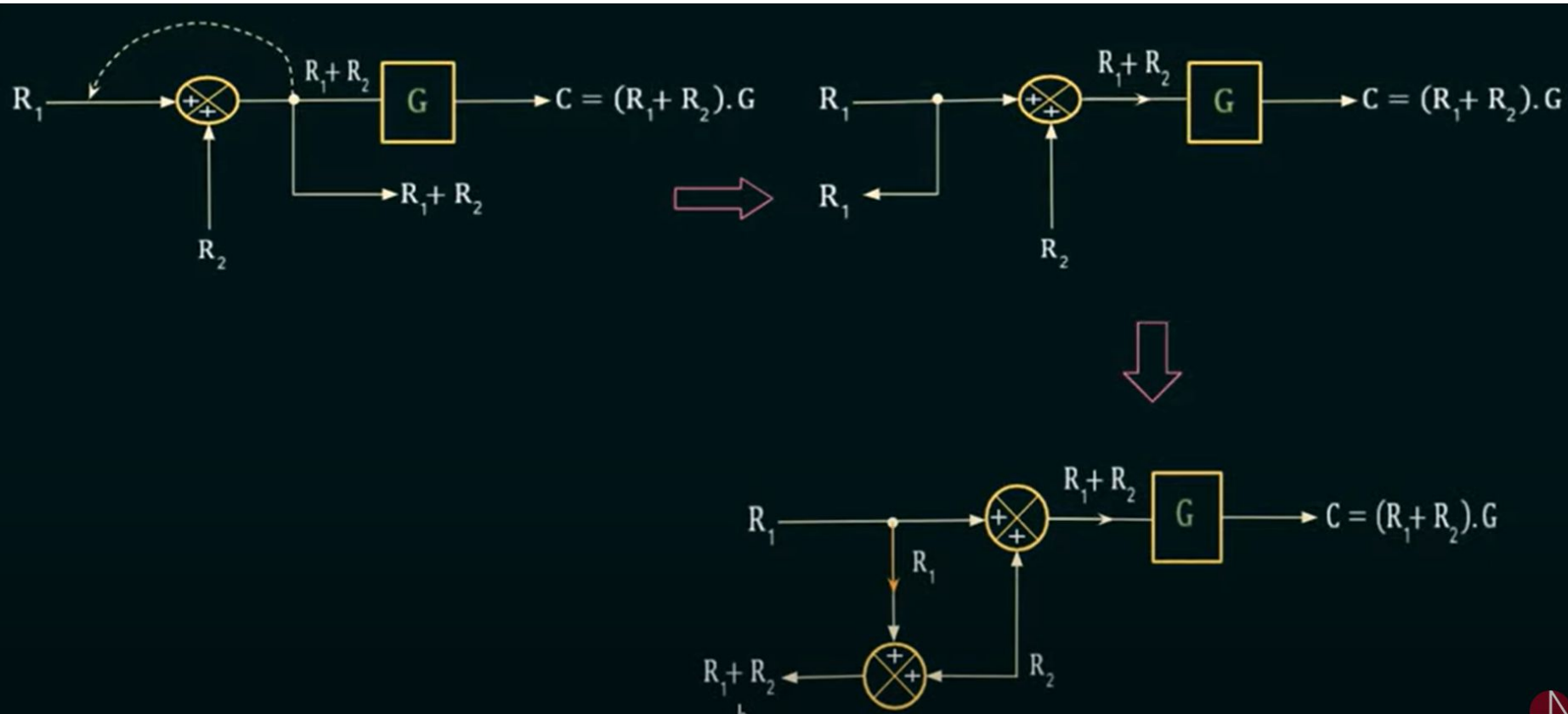
Rule : 4



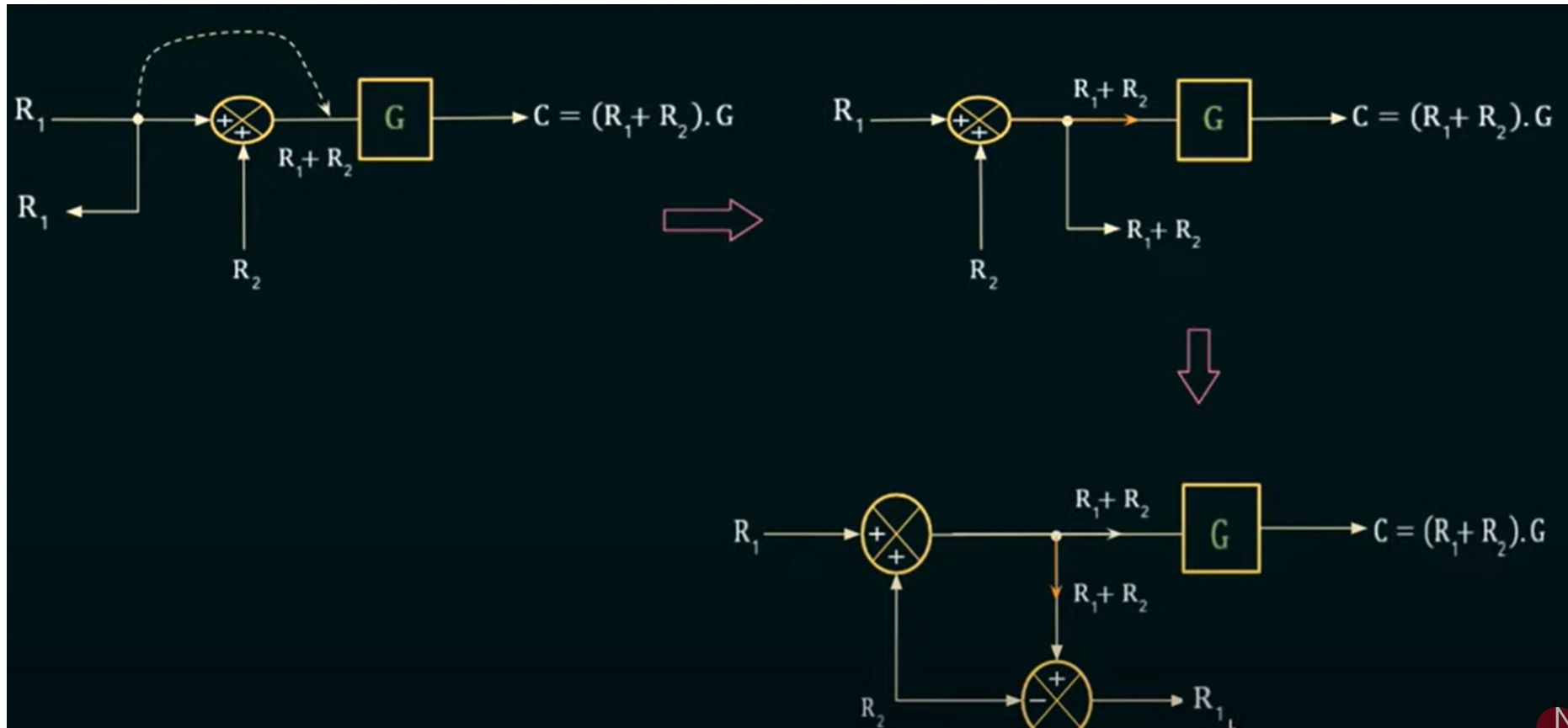
Rule : 5



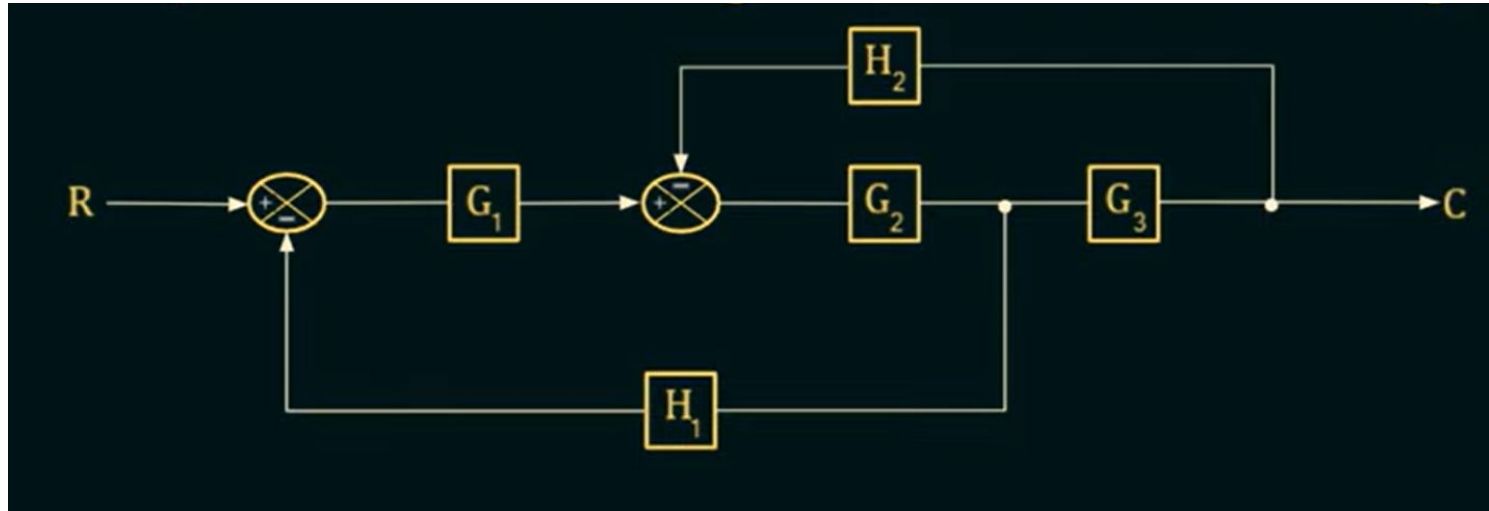
Rule : 6

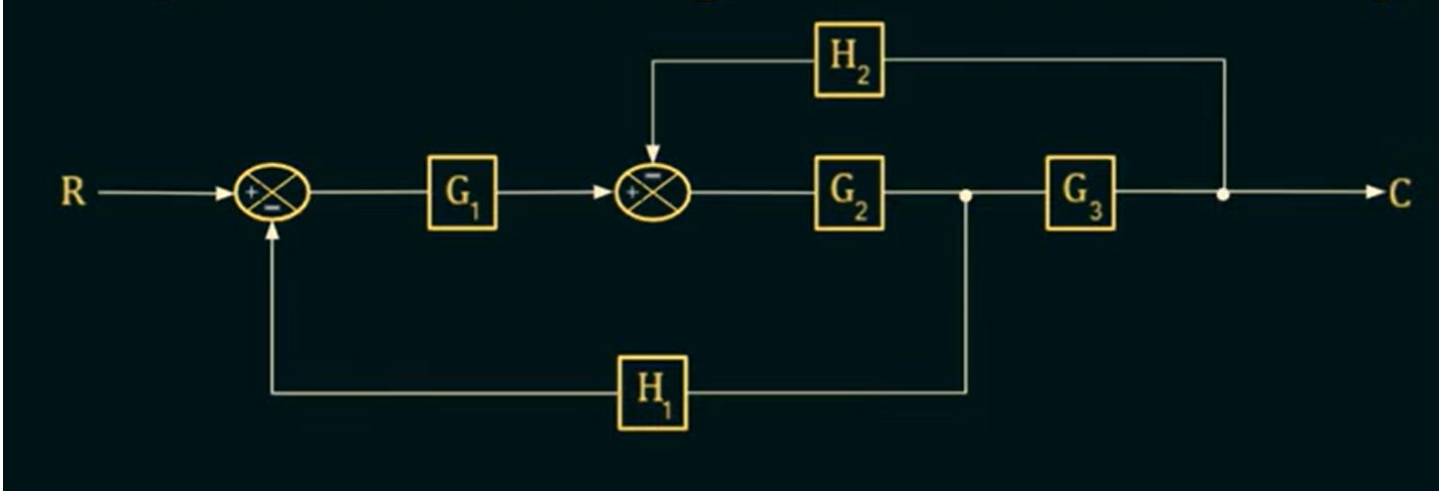


Rule : 7

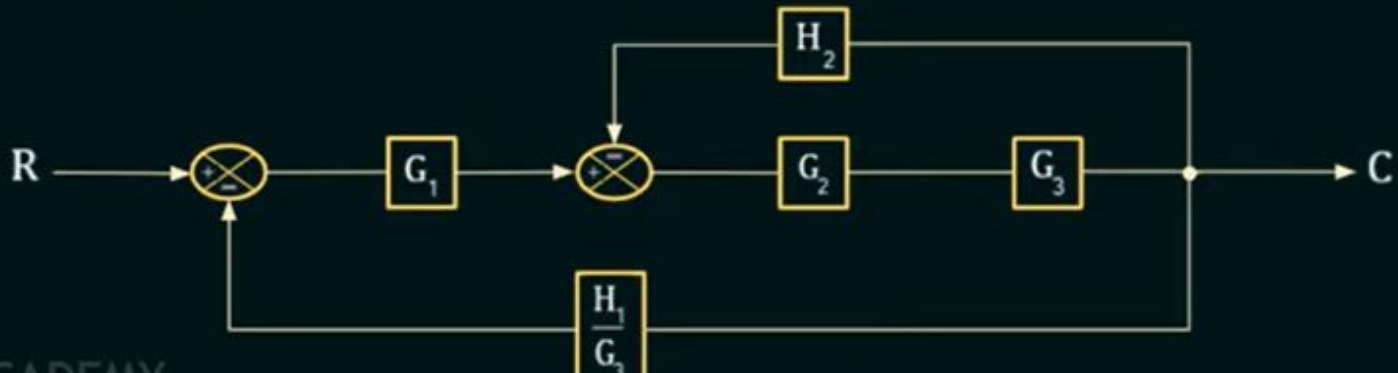


Problem 1:

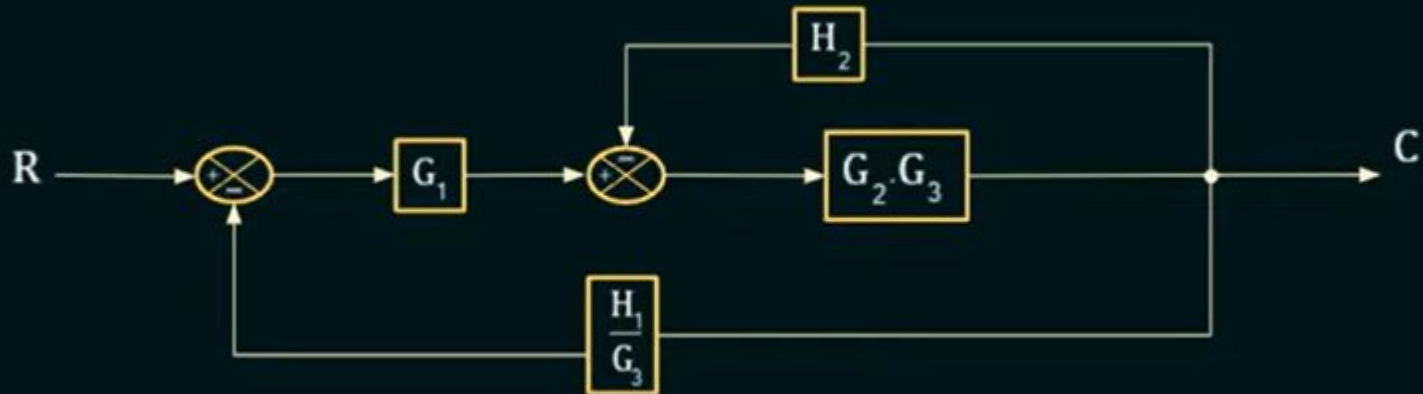
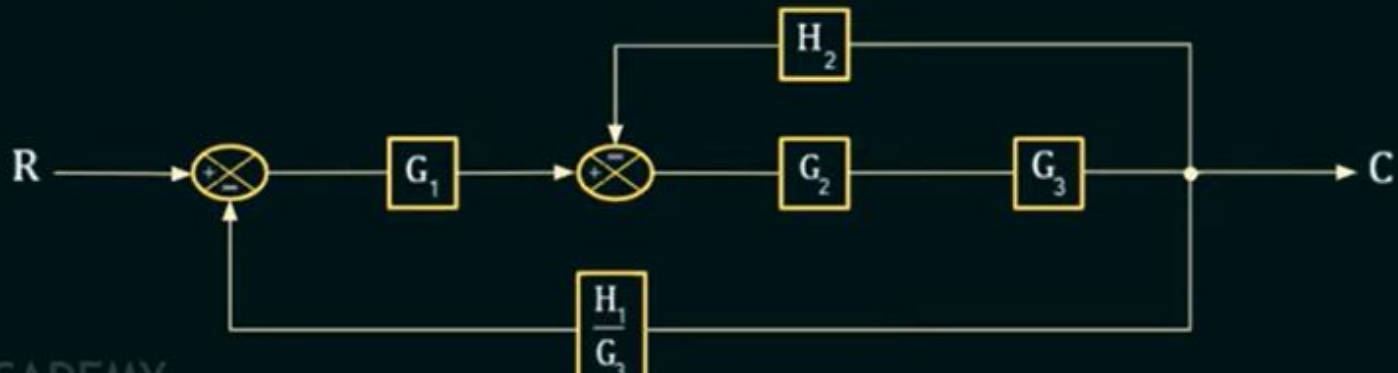


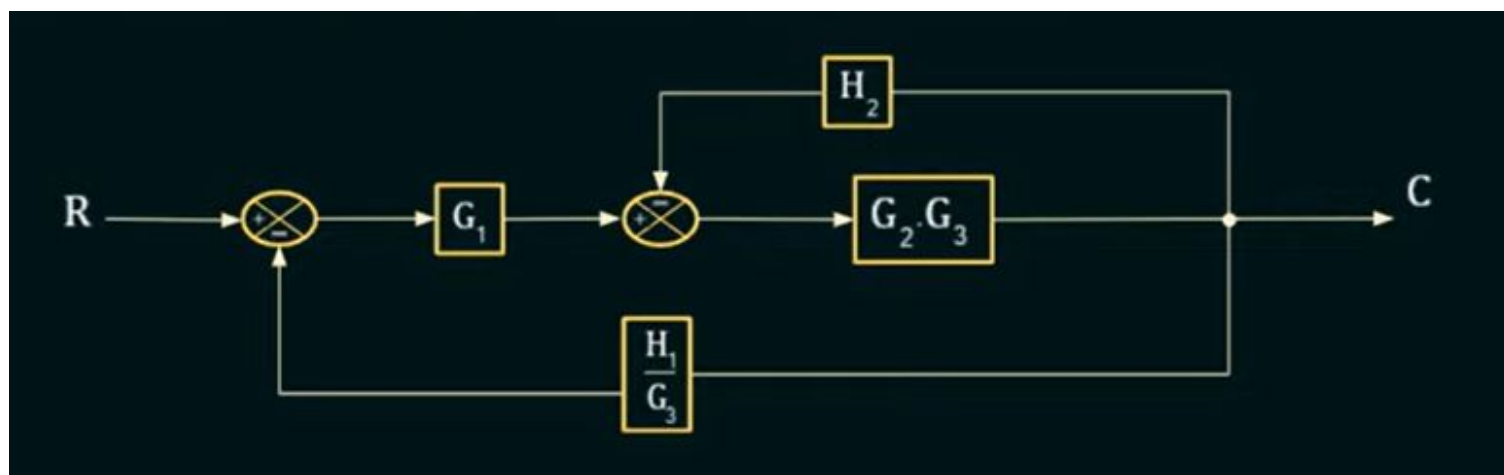


Solution: Step 1: Shifting the take-off point after the block.



Solution: Step 1: Shifting the take-off point after the block.

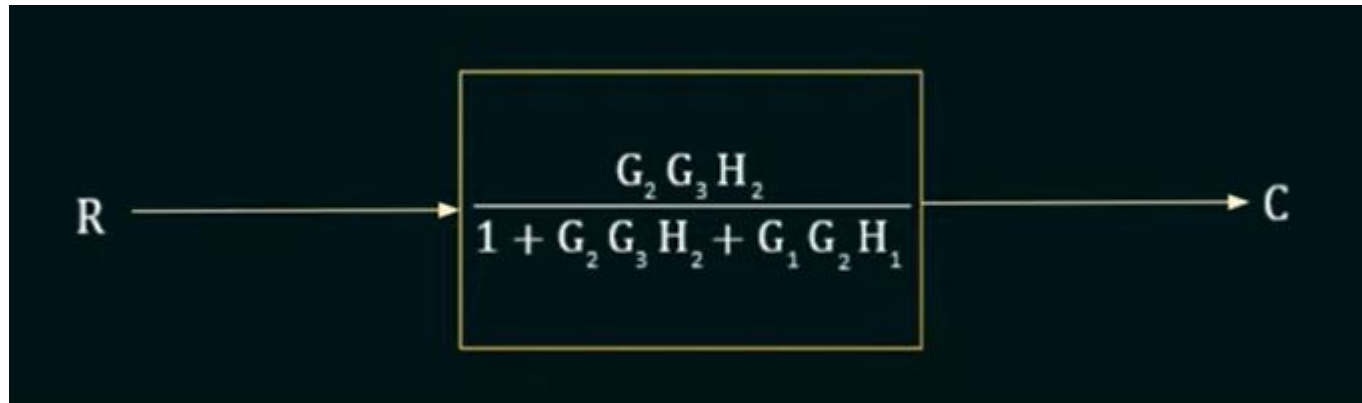




Step 3: Solving the negative feedback.



Result



Next Class

PID Control

Thank You