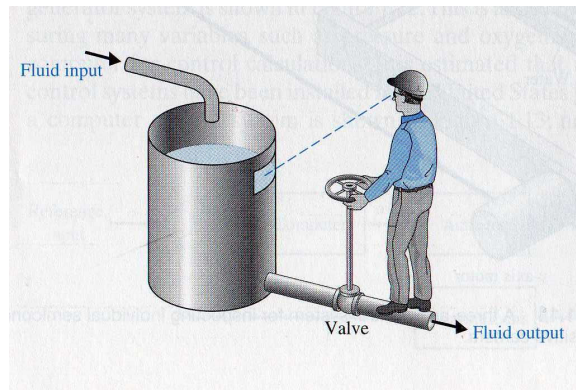


Below is the figure of a control system for regulating the level of fluid in a tank by adjusting the output valve. The operator views the level of fluid through a port in the side of the tank.



1. Describe in your own language how the system works.
2. Identify input, controller, output, and sensor (if any) of the system.
3. Is this an open-loop or closed-loop control system? Draw its block diagram.
4. If you were to automate this system and replace the man by a computer, what kind of sensors would you employ? Write the control commands you would use (in IF...THEN format.)