

Matlab Function (User defined Function)

$x \leq 110 \rightarrow y = 1$ terbuka penuh
 $x \geq 120 \rightarrow y = 0$ tertutup penuh
 $110 < x < 120$

$$\frac{y-1}{0-1} = \frac{x-110}{120-110}$$

$$10(y-1) = -x + 110$$

$$y-1 = -0.1x + 11$$

$$y = -0.1x + 12$$

masuk ke pelampung, m

check $(0 < y < 1)$

$x = 110 \rightarrow y = -11 + 12 = 1$
 $x = 120 \rightarrow y = -12 + 12 = 0$

Volume silinder

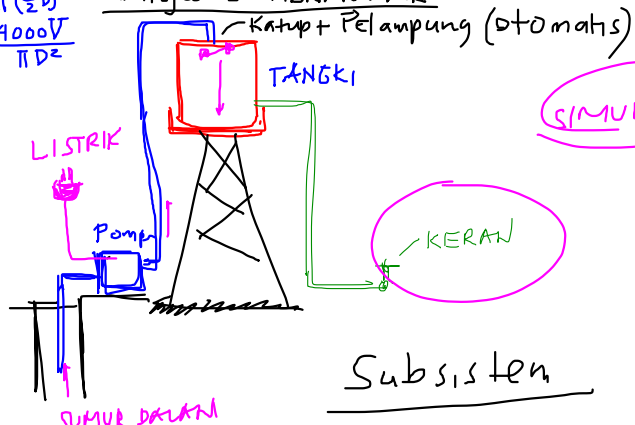
$$\pi r^2 h = 10000 V$$

$$r = \frac{1}{2} D \text{ [cm]}$$

$$h = \frac{10000 V}{\pi (\frac{1}{2} D)^2}$$

$$V(\text{liter}) = \frac{9000 V}{\pi D^2}$$

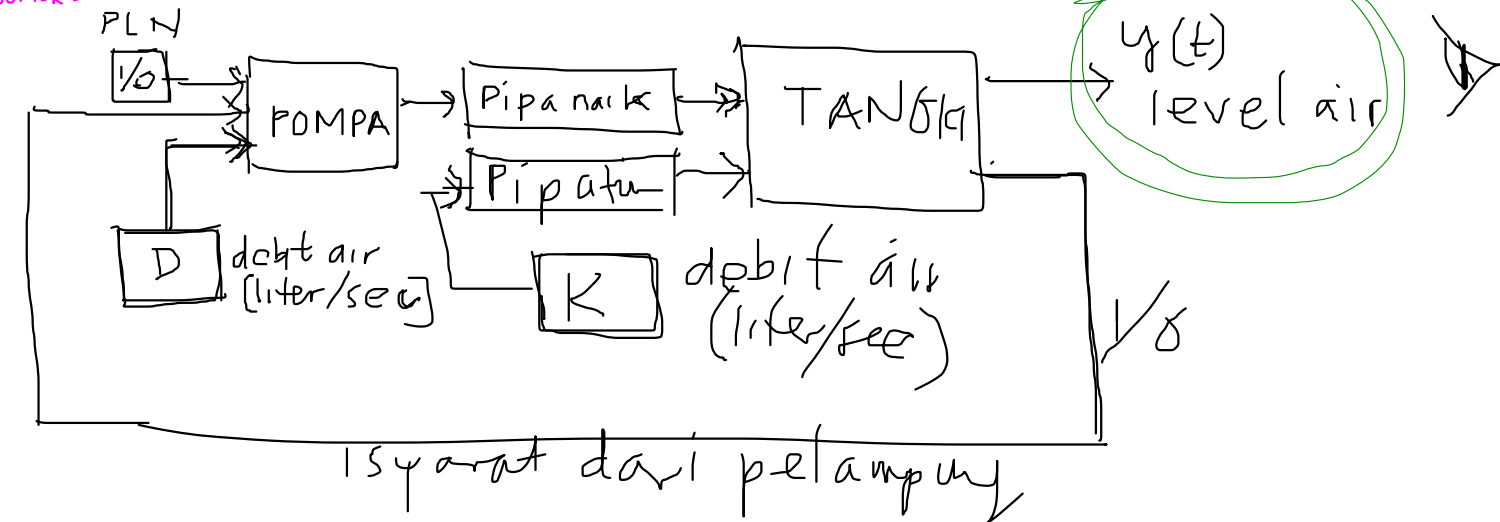
*** Project 3 MENARA AIR**



SIMULINK

Subsisten

Jika keran dibuka maka air mengalir ke luar dengan debit K liter/sec



$y(t)$
level air