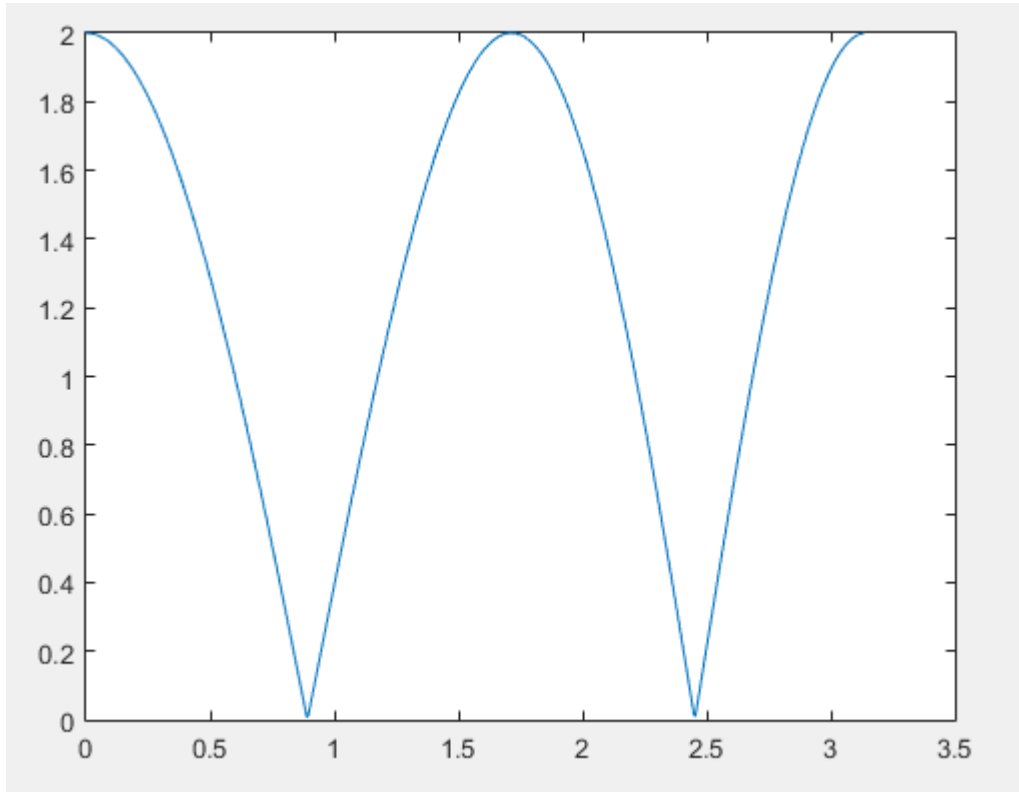


## LAB 7 Assignment

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Tuesday 17<sup>th</sup> November, 2015

7-5 Plot of frequency response of the system.



System is built by two cascaded second order all pass filter. With parameters as  $b = [x^2 \ 2x \cos(\theta) \ 1]$  and  $a = \text{flip}(b)$  where  $\theta$  is desired notch frequency. Single transfer function goes like:

$$H(z) = \frac{R^2 X(z) - 2R \cos \theta X(z-1) + X(z-2)}{Y(z) - 2R \cos \theta Y(z-1) + R^2 Y(z)}$$