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How do I run a high pass or low pass filter on data points in R?
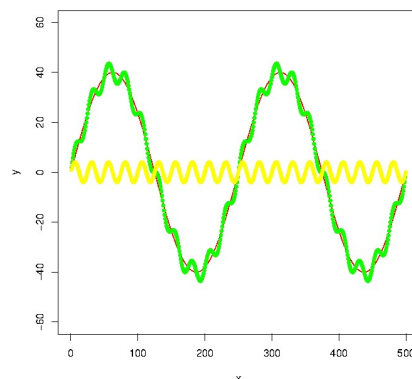
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I am a beginner in R and I have tried to find information about the following without finding anything.

The green graph in the picture is composed by the red and yellow graphs. But let's say that I only have the data points of something like the green graph. How do I extract the low/high frequencies (i.e. approximately the red/yellow graphs) using a low pass/high pass filter?

Update: The graph was generated with

```
number_of_cycles = 2
max_y = 40

x = 1:500
a = number_of_cycles * 2*pi/length(x)

y = max_y * sin(x*a)
noise1 = max_y * 1/10 * sin(x*a*10)

plot(x, y, type="l", col="red", ylim=range(-1.5*max_y,1.5*max_y,5))
points(x, y + noise1, col="green", pch=20)
```