Final Matlab Project
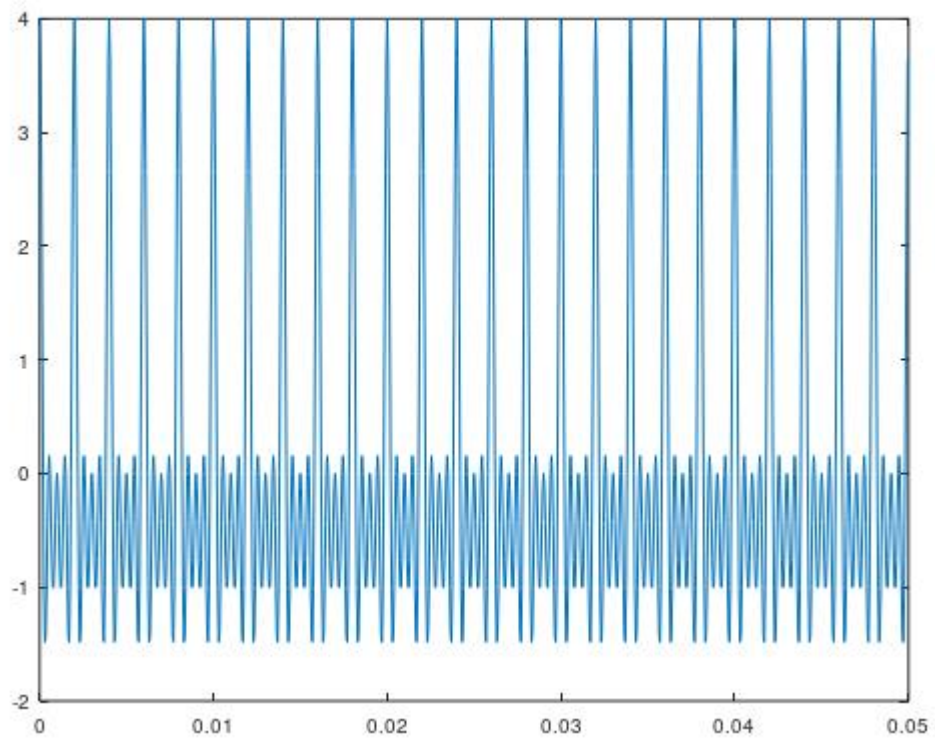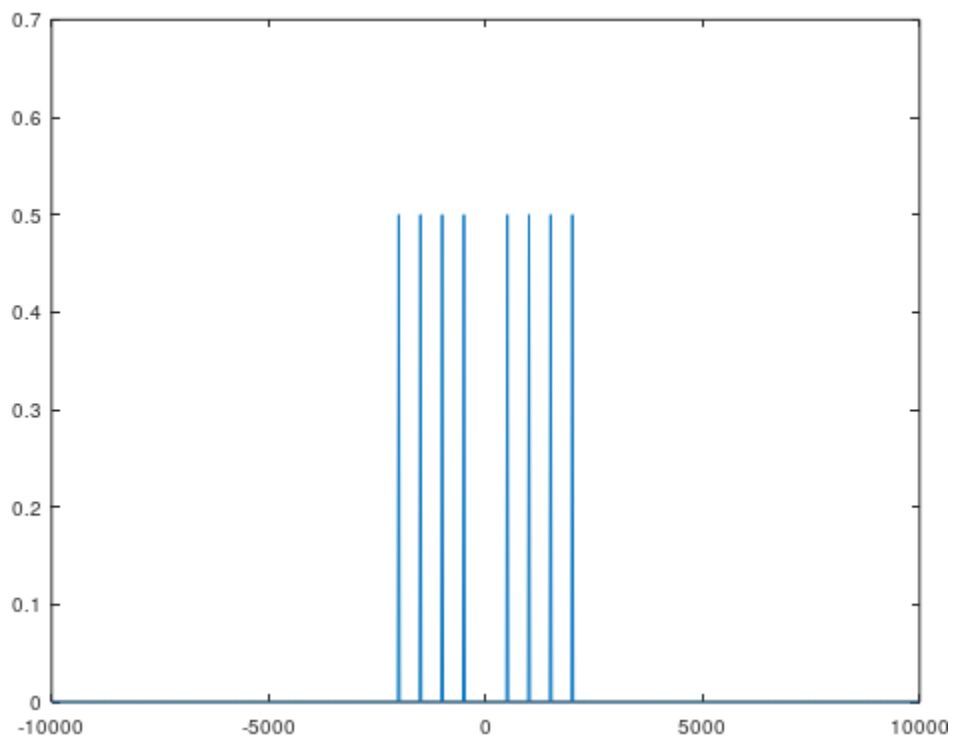
Submitted to:

Dr. Michael Ibrahim

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Submitted by:

Omar Helmy Ibrahim Elbanna (19P3904)

Shehab Adel Ramadan Moharram (19P4512)

Omar Tarek Mohamed Mohamed (19P2772)

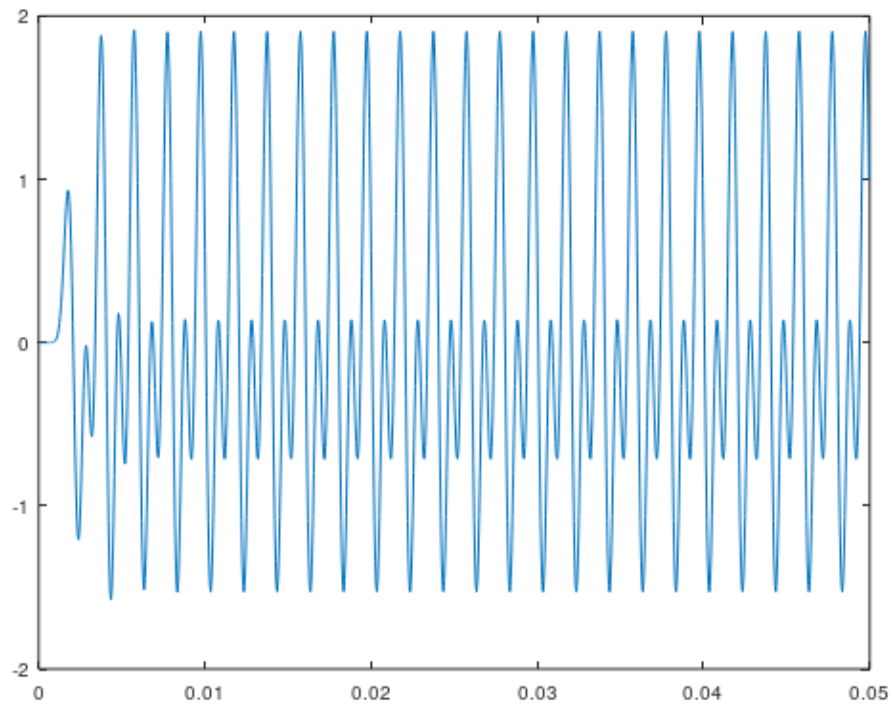## Omar Mohamed Abdelmoniem(19P4953)

X(t) | E = 0.1J
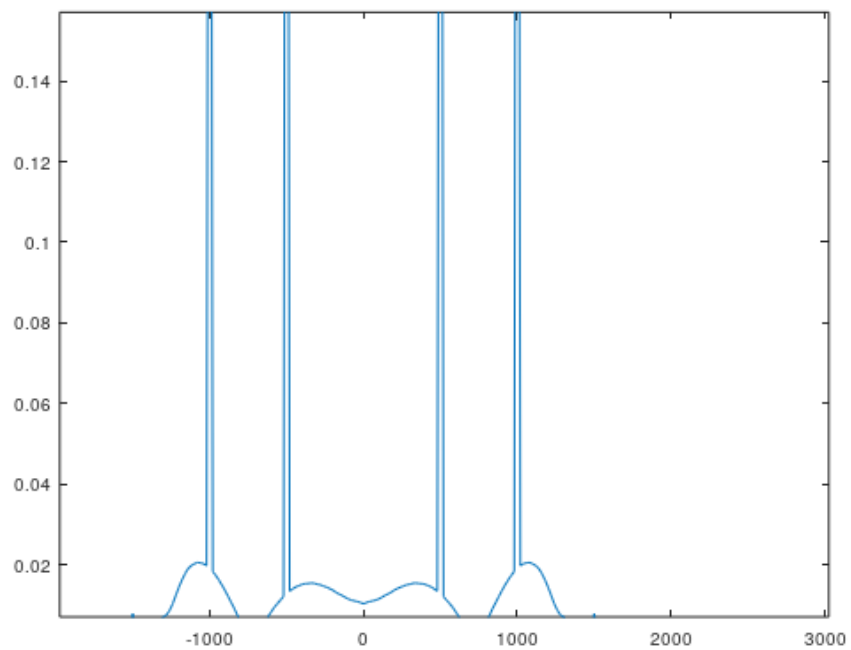

Spectrum of X(t) | E = 0.1J (Parseval's)

Spectrum has 4 impulses at the four given frequencies (500,1000,1500,2000)
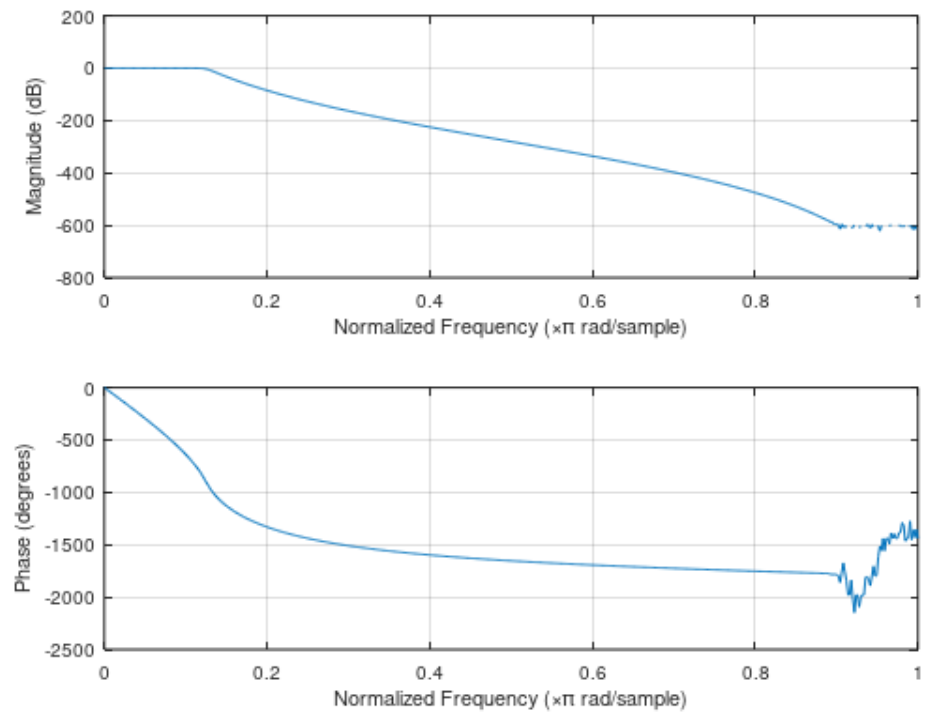
Y1(t) "LPF OUTPUT" | E = 0.048138J

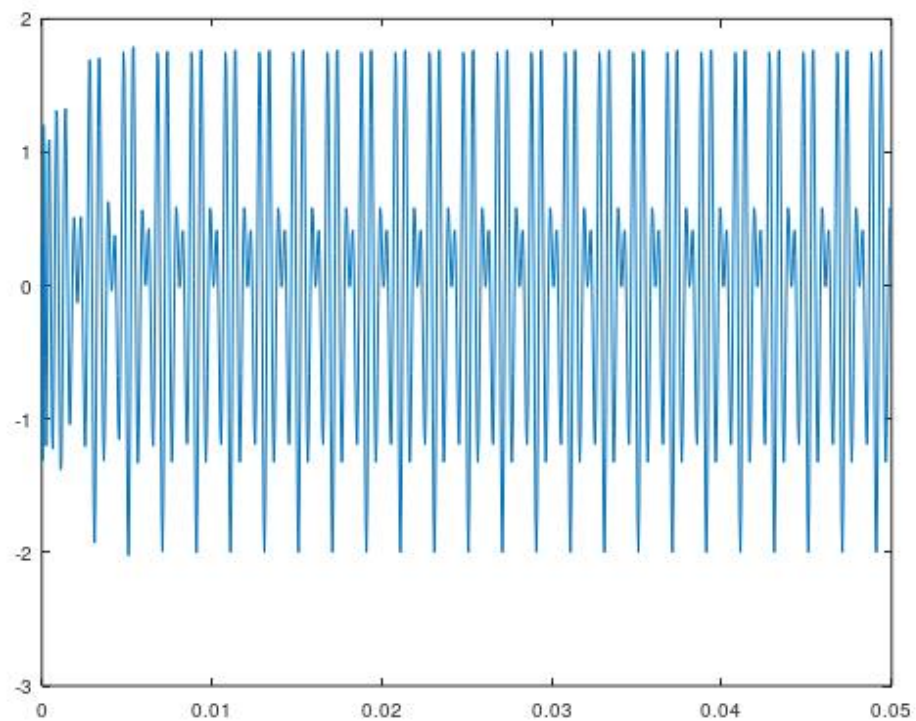## Spectrum of Y1(t) | E =0.048138J (Parseval's)

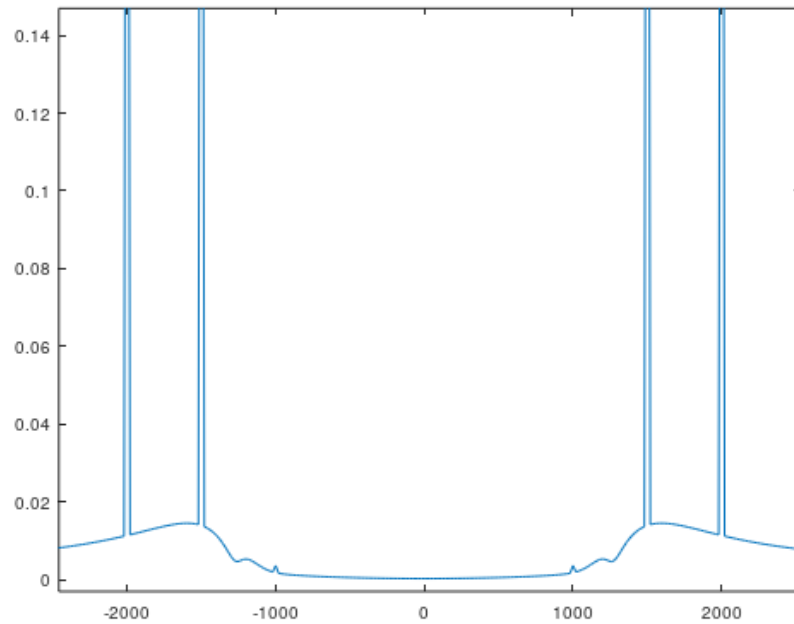**LPF has cut-off frequency = 1250Hz, therefore only 2 impulses appeared of (500,1000)**

Magnitude and Phase Response of LPF

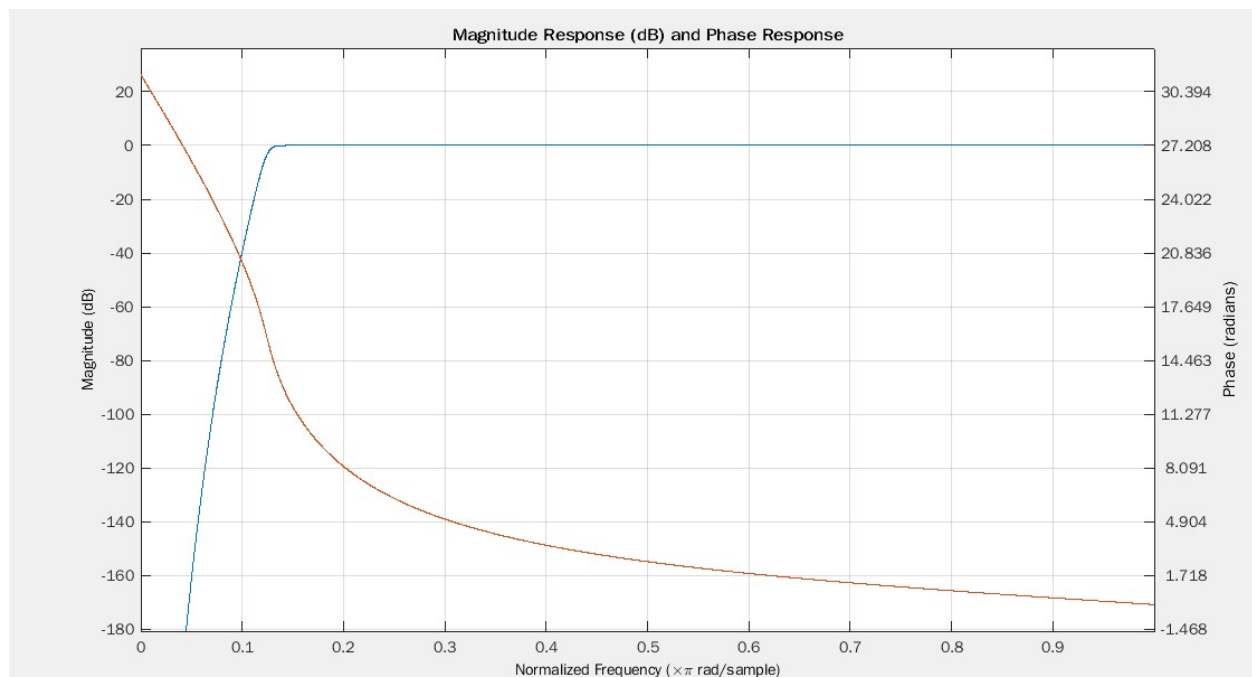## Y2(t)"HPF Output"| E = 0.049439J

Spectrum of Y2(t) | E = 0.049439J (Parseval's)

HPF has cut-off frequency = 1250Hz, therefore only 2 impulses appeared of (1500,2000)

Magnitude and Phase Response of HPF

Contribution of Each Student

Student	Requirements Steps
Omar Helmy Ibrahim Elbanna (19P3904)	Steps (1:7)
Omar Tarek Mohamed Mohamed (19P2772)	Steps (8:13)
Shehab Adel Ramadan Moharram (19P4512)	Steps (14:19)
Omar Mohamed Abdelmoniem(19P4953)	Steps (20:26)