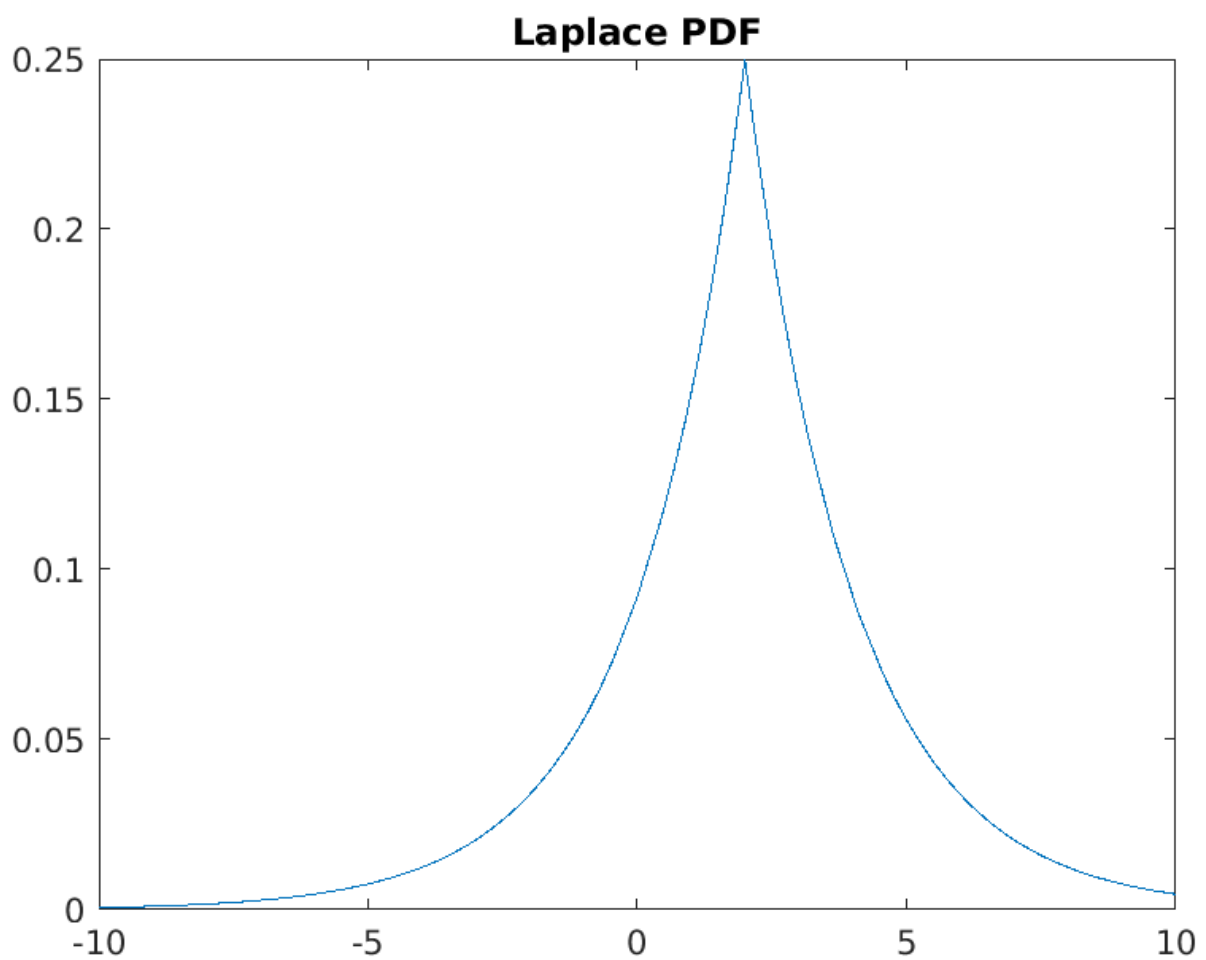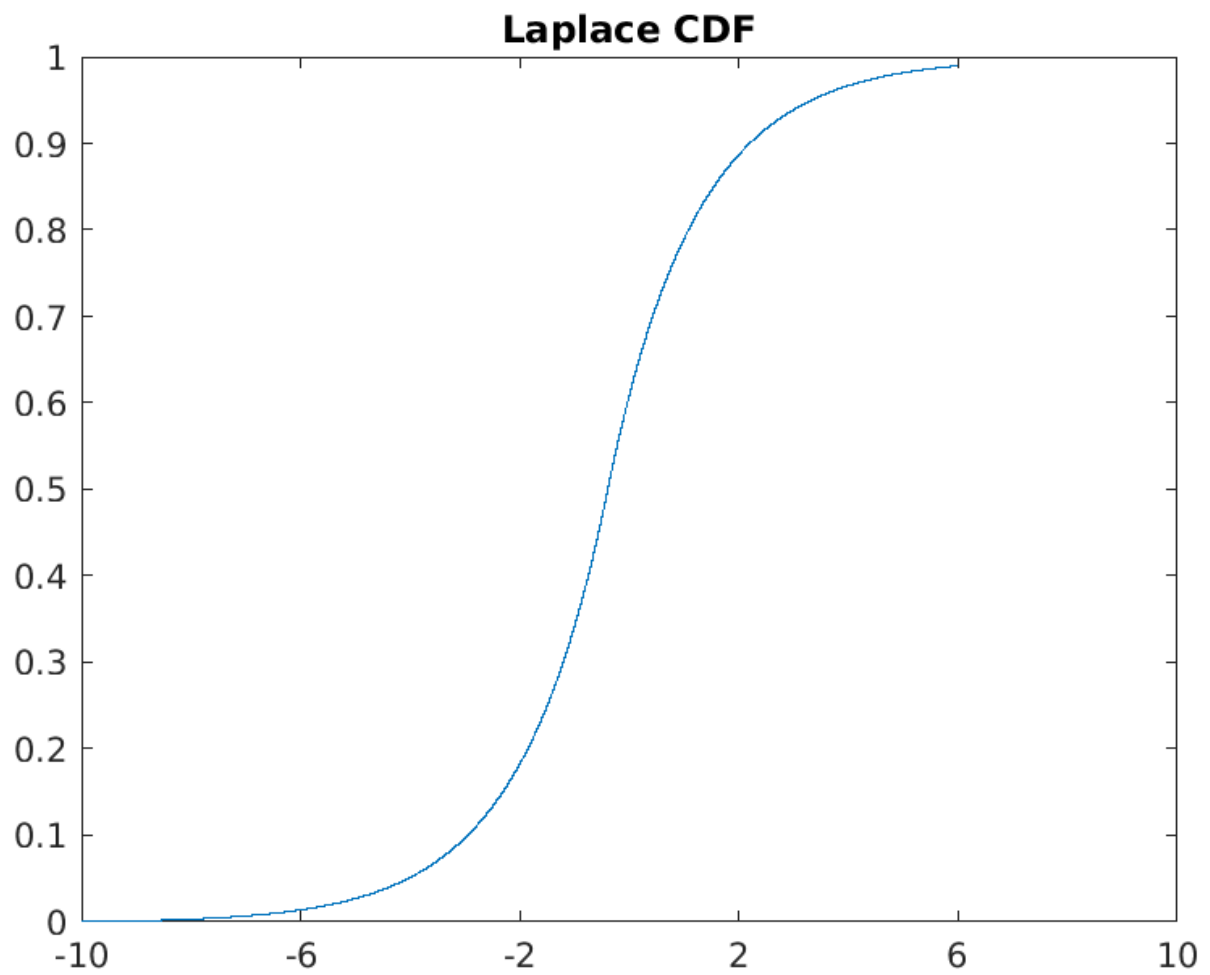# Problem 1

How to run code

- My submissions are live-scripts of matlab
- They are in zip format, don't unzip them
- Open matlab go to the folder of that zip and open the *.mlx files from matlab
- They would appear as jupyter notebook with markdown, codeblock and outputs.
- Press ctrl + enter to run each code block
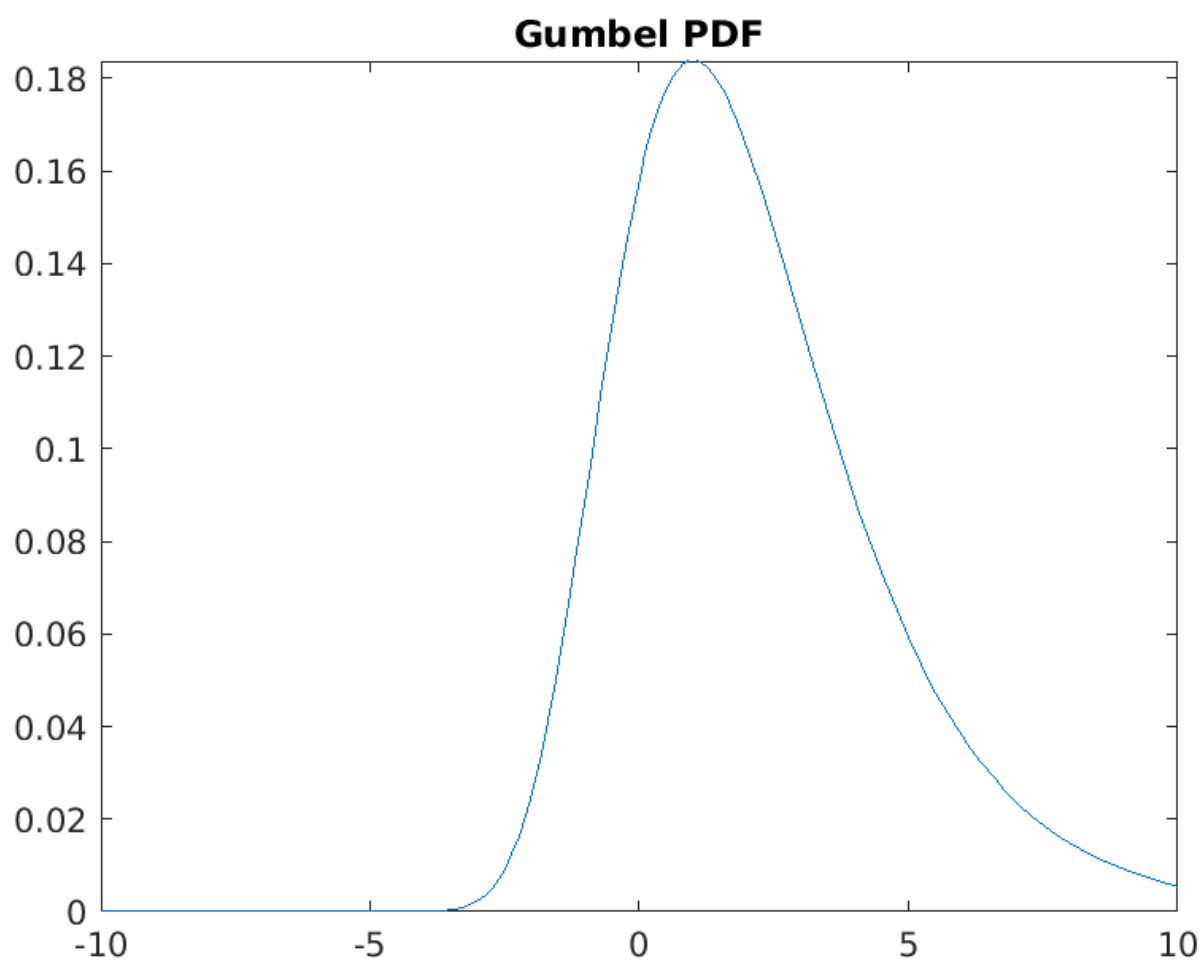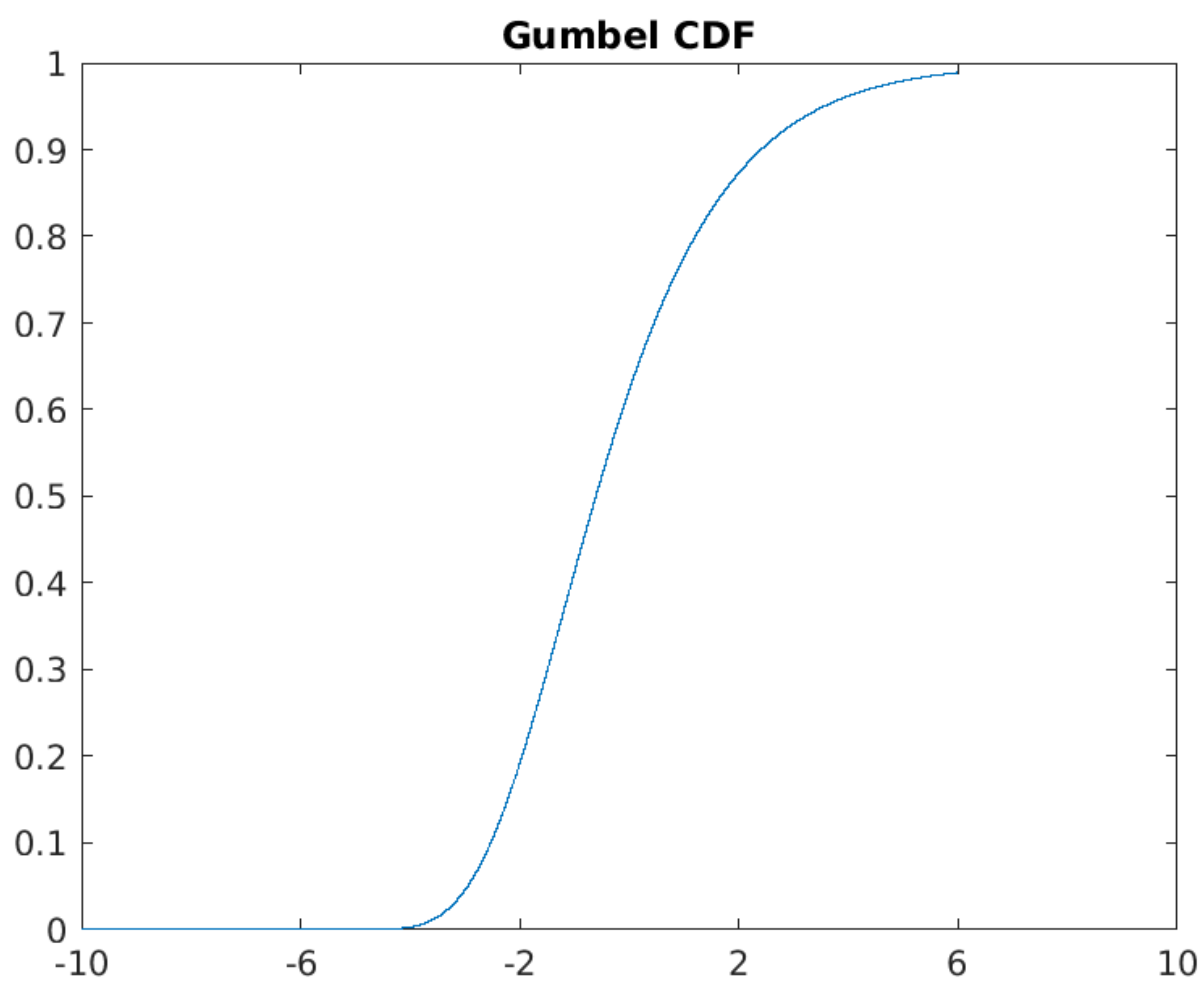
Part 1 (Laplace pdf)

(i)

Laplace PDF

(ii)

Laplace CDF

(iii)

empirical_variance = 8.0000
true_variance = 8

Part 2 (Gumbel pdf)

(i)

Gumbel PDF

(ii)

Gumbel CDF

(iii)

empirical_variance = 6.5797
true_variance = 6.5797

Part 1 (Cauchy pdf)

(i)

Cauchy PDF

(ii)

Cauchy CDF
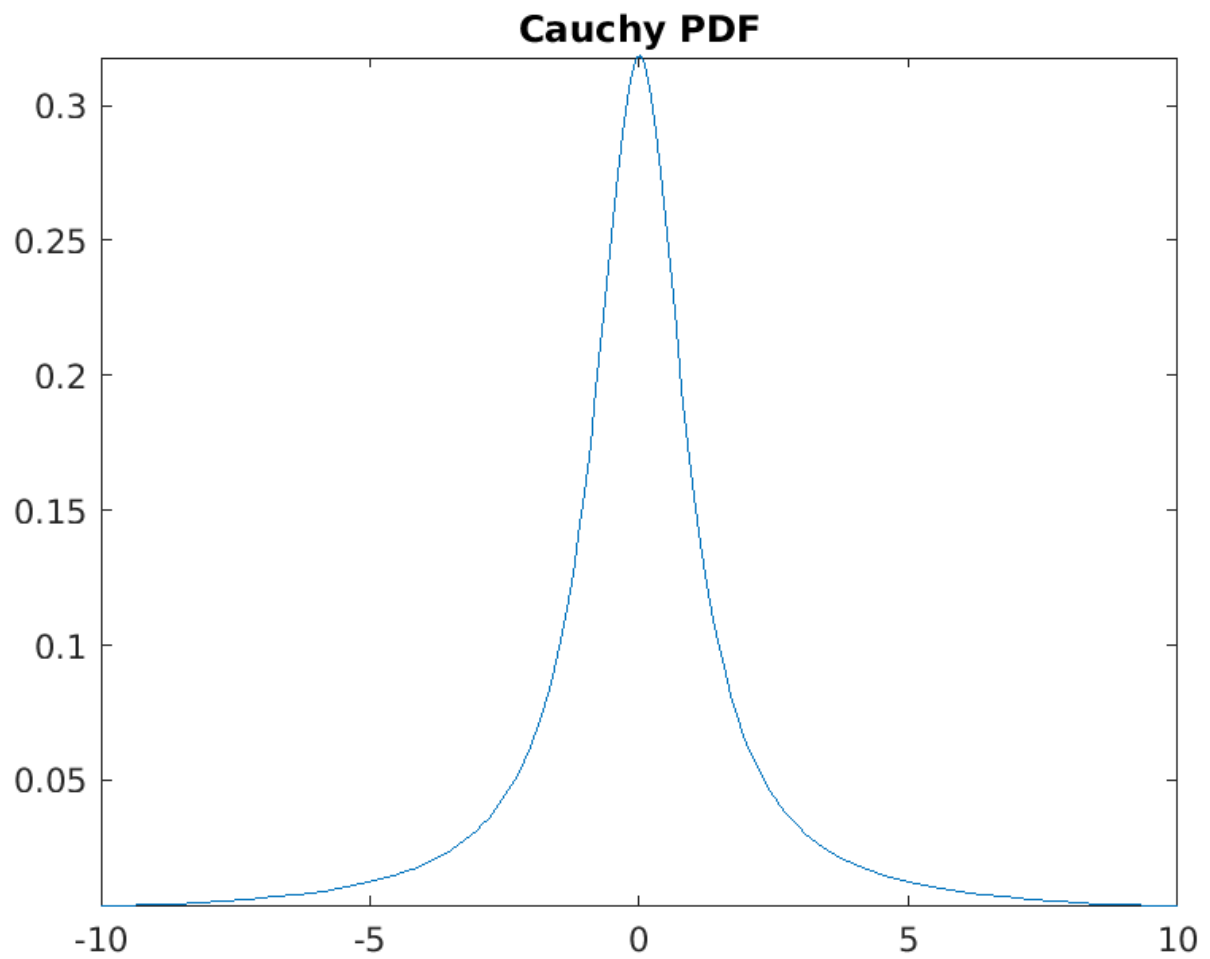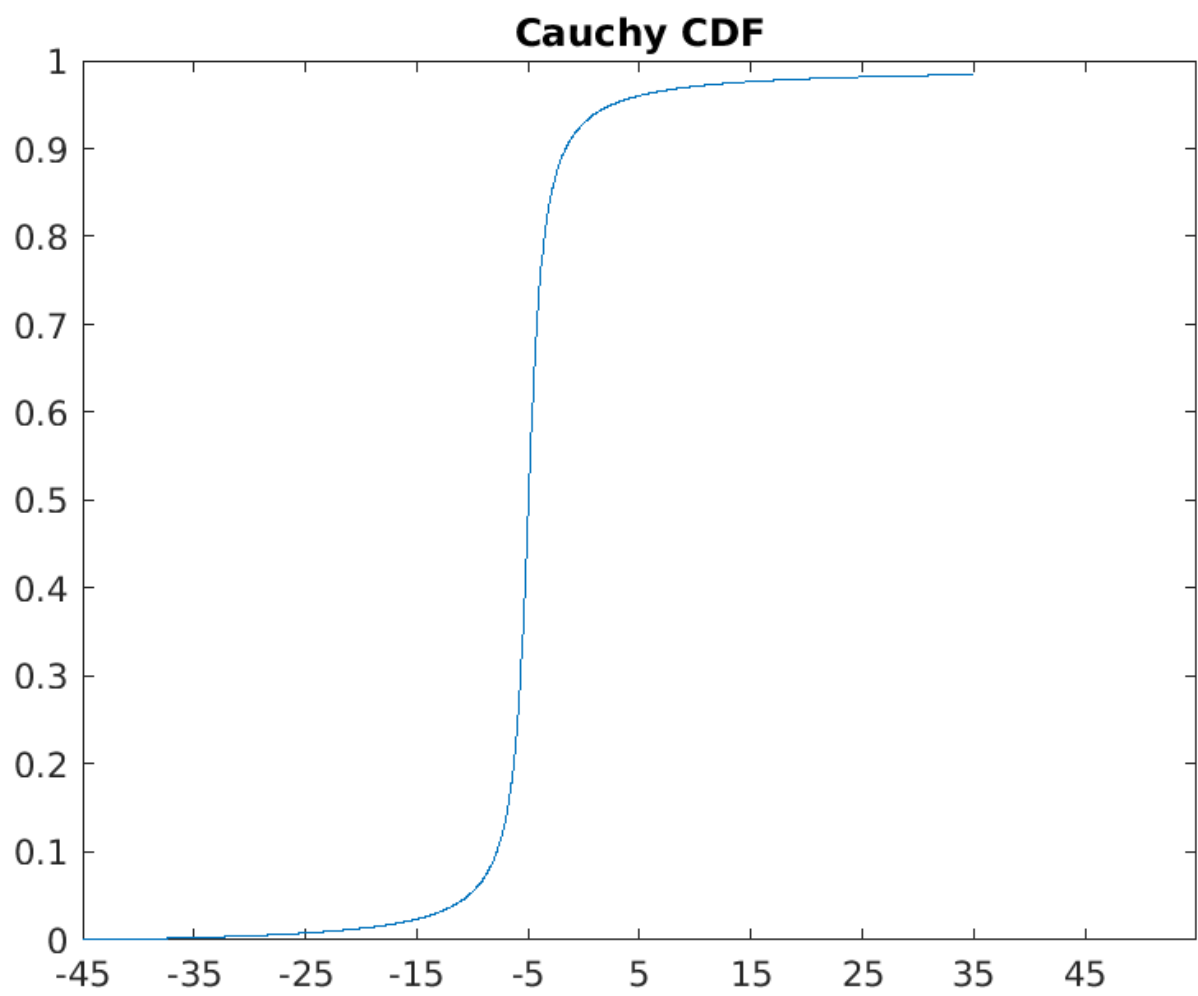
(iii)

- Variance is not finite