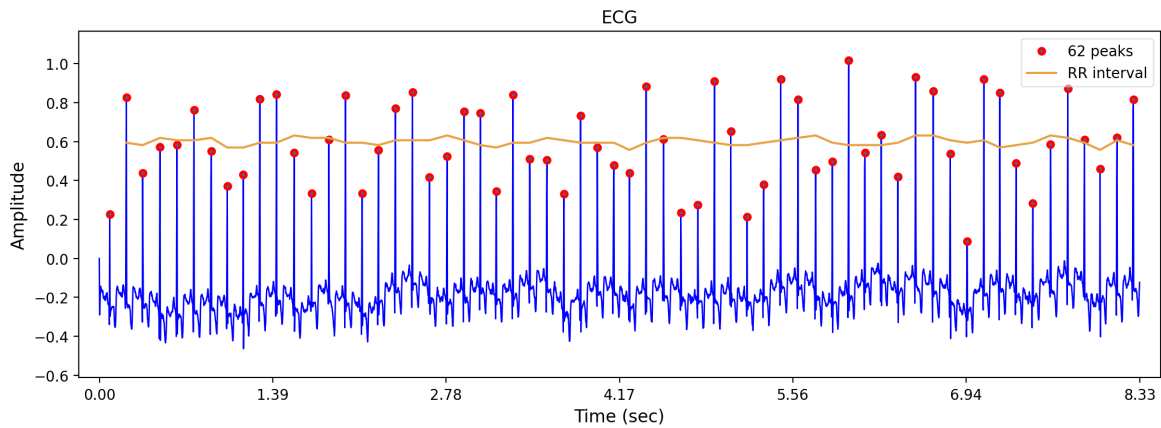


ECG monitor

Write a program that receives in input the name of a file containing sampling from an ECG and plots the ECG signal highlighting heartbeats with a red dot (.), and computes and plots in the same chart the RR interval.

The program also receives in input the sampling rate (frequency) of the ECG in order to correctly set the scale on the plot.

As an example of the expected output is reported in the figure below.



Do note that not all peaks are identified as heartbeats, the sampling possibly includes noise.