`GaborWigner_main.m` is the main code.
`GaborWigner.m` is the function.

How to use:
Open `GaborWigner_main.m`.
The inputs are
`dtau, dt, df, tau, t, f, x, a, b, thr, sigma.`
`dtau`=1/fs where fs is the sampling frequency of the input signal `x`.
`t` and `f` are the time and frequency axis of the output plot, respectively.
`dt` and `df` are the increments of the time and frequency axis.
`a, b` are the weights of the Gabor and Wigner transform.
`thr` is the threshold.

$$\mathrm{D}_x(t,f)=\{|G_x(t,f)|>thr\}^a\times W_x(t,f)^b$$

`sigma` is for scaled Gabor transform.

$$G_x(t,f)=\sqrt[4]{\sigma}\int_{-\infty}^{\infty}e^{-\sigma\pi(\tau-t)^2}e^{-j2\pi f\tau}x(\tau)d\tau$$

Examples are included in the main code.