## [NOTICE]

- Don't talk
- You can take a look at your notebook, report \#1, and web pages of this lecture
- You can check your answer by using MATLAB

Let $M$ be a matrix given as:

$$
M=\left[\begin{array}{cc}
\sqrt{2} & -\sqrt{2} j \\
0 & 0
\end{array}\right] .
$$

Answer the followings:
(1) $\bar{M}$
(2) $M^{*}$
(3) $M^{*} M$
(4) $\lambda_{i}\left(M^{*} M\right)$
(5) $\sigma_{i}(M)$
(6) $\bar{\sigma}_{i}(M)$

