## Mini report #1 (Advanced Automation) 2017.11.2

Student #:

Name:

## [NOTICE]

- write by hand
- due date: 2016/11/8 17:00; place of submission: room 405(機械建設1号棟 小林)
- check if your answer is correct or not before submission by using Matlab

Let M be a matrix given as:

$$M = \begin{bmatrix} j & j \\ 0 & 1 \end{bmatrix}.$$

Answer the followings:

(1)  $\bar{M}$ 

**(2)** *M*<sup>\*</sup>

**(3)** *M*\**M* 

(4)  $\lambda_i(M^*M)$ 

(5)  $\sigma_i(M)$ 

(6)  $\bar{\sigma}(M)$