HW4

# Created by Wei Ye

# Date: Jun 22, 2022

# Due date: Jun 22, 23:59

For question 1,2,3, please see the 'm' file named 'hw\_1\_2\_3.m' in which i write a function to compute A\_inverse, A\_inverse\_decom(eigendecomposition method) and A\_half(via eigendecomposition method).

## Question 4

It is in the file of 'hw4-4.m'.

## Question 5

**Note: Added on July 3,2022. I** changed the m file's name for the requirement of hw, it can't run well in this file. The following is ran based on the date i did for the hw on June 22, 2022.

my\_quant\_price\_sugar(5,25)

my\_quant\_price\_sugar(10,25)

my\_quant\_price\_sugar(100,25)

k1=[[5,1],[25,10]];

my\_quant\_price\_sugar\_2prods(k1)

k2=[[10,9],[25,10]];

my\_quant\_price\_sugar\_2prods(k2)

k3=[[20,20],[25,10]];

my\_quant\_price\_sugar\_2prods(k3)

## Question 6

Test some matrix

A=[2 3 4;7 8 9;15 31 17];

ex\_transpose(A) %check whether our matrix transpose is equal to matlab methods. 1 for true 0 for false.

## Question 7

See the matlab file 'ols.m'.