資訊107鞠之浩HW3

clear all;

clc;

%5.41

x=binopdf(10,18,0.7)+binopdf(11,18,0.7)+binopdf(13,18,0.7);

y=hygepdf(10,17000,18,11900)+hygepdf(11,17000,18,11900)+hygepdf(12,17000,18,11900)+hygepdf(13,17000,18,11900);

fprintf('5.41\n');

fprintf('binomial %.16f\n',x);

fprintf('hypergeomeric %.16f\n',y);

figure(1);

hold on;

title('5.41');

xlabel('N');

ylabel('probability');

x=0:18;

y=binopdf(x,18,0.7);

y2=hygepdf(x,17000,18,11900);

plot(x,y,'O',x,y2,'X');

legend('binomial','hypergeomeric');

%5.87

x=binopdf(0,200,0.03);

y=poisspdf(0,6);

fprintf('5.87\n');

fprintf('binomial %.16f\n',x);

fprintf('poisson %.16f\n',y);

figure(2);

hold on;

title('5.87');

xlabel('N');

ylabel('probability distributions');

x=0:200;

y=binopdf(x,200,0.03);

y2=poisspdf(x,6);

plot(x,y,'O',x,y2,'X');

legend('binomial','probability');

執行結果:

5.41

binomial 0.4204429643104474

hypergeomeric 0.6079669462554025

5.87

binomial 0.0022612410099958

poisson 0.0024787521766664



