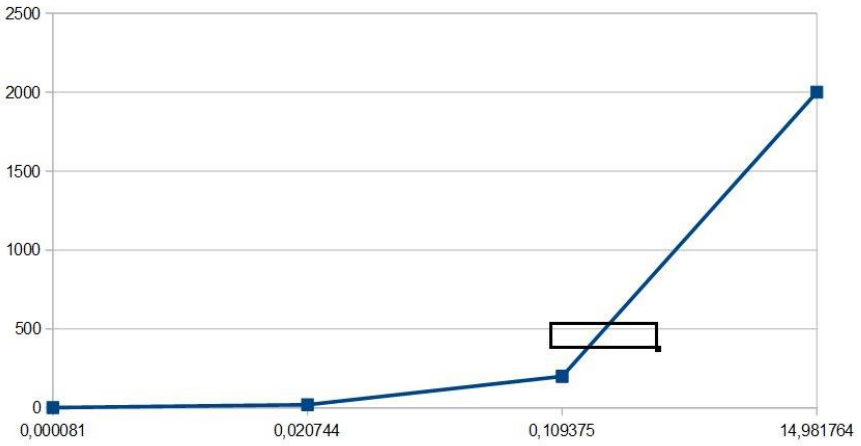
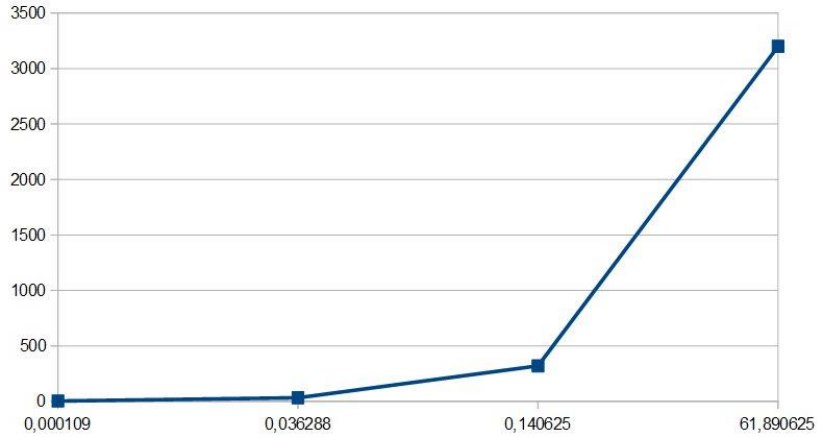
Zadanie 5
Krzysztof Kozubek(Matlab)

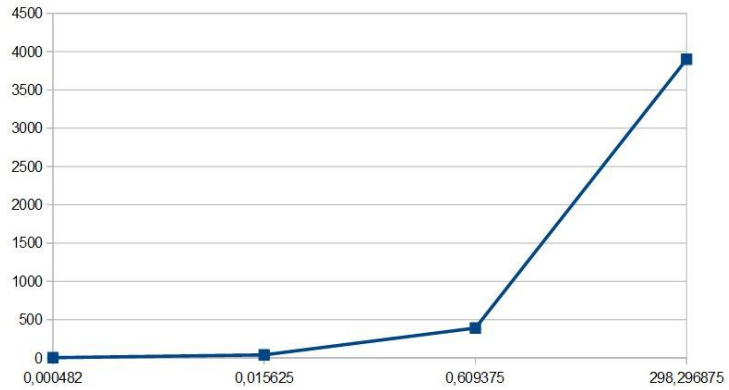
wielkosc	czas
2	0,000081
20	0,020744
200	0,109375
2000	14,981764



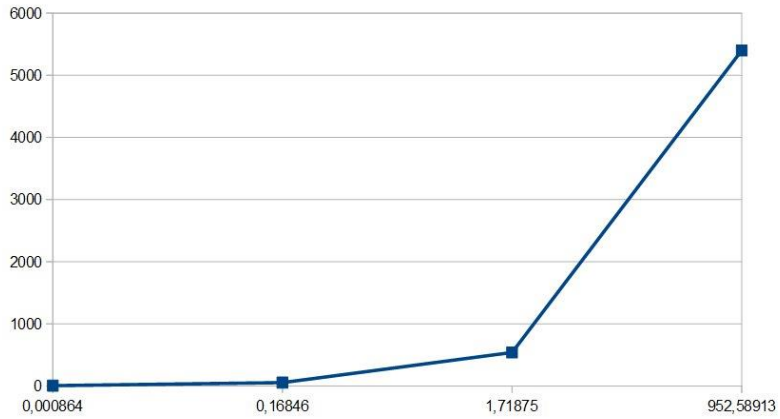
wielkosc	czas
3	0,000109
32	0,036288
320	0,140625
3200	61,890625



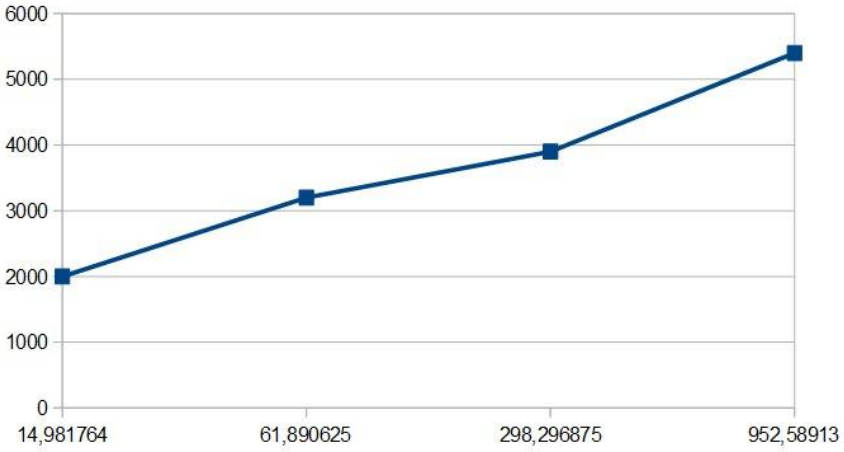
wielkosc	czas
3	0,000482
39	0,015625
390	0,609375
3900	298,296875



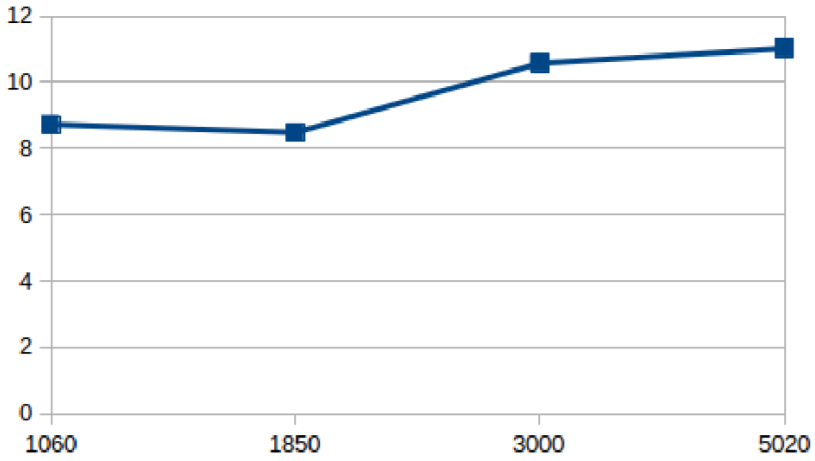
wielkosc	czas
5	0,000864
54	0,16846
540	1,71875
5400	952,58913



wielkosc	czas
2000	14,981764
3200	61,890625
3900	298,296875
5400	952,58913



Poniżej wykres zależności od rozmiaru macierzy oraz log(Kappa).



Kod funkcji w matlabie do generowania macierzy oraz obliczania log(Kappa).

```
function [ N, time ] = myprog(N)
for j=1:10 time = tic;
for i = 1:10
G = normrnd(0,1, N, N);
A((i-1)*N+1:N*i)=eig(G);
kappa(i)=cond(G);
log_kappa(i)=log(kappa(i));
end;
```