

```
function detchecker(~)
format long
n=10;
detA=[];
detB=[];
for i=1:n
    A = rand(10,10);
    d = diag(A);

    if (max(d, [], 'all')/min(d, [], 'all'))<10    %well conditioned
        detA(i)=prod(d);
    else    %not well conditioned
        detB(i)=prod(d);
    end
end
detA
detB

%both are small
```