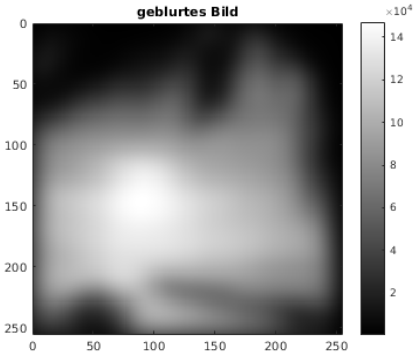
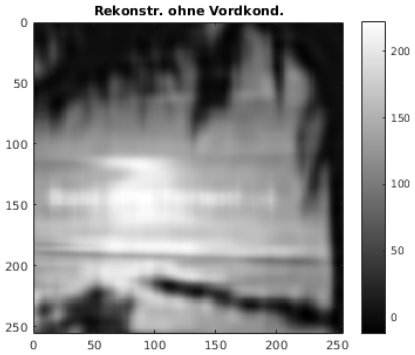
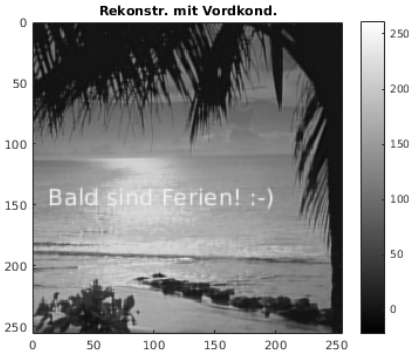
```
% Autor:  Alexander Mock
% Kurs: Numerik Sommersemester 2017

colormap(gray(256));
n=256;

load('blurA.mat'); %beinhaltet geblurtes Bild B als Matrix
vecB=B(:); %B->Vektor
subplot(2,2,2);
imagesc(B);
colorbar
title('geblurtes Bild')
axis equal;
axis([0,255,0,255])


funBlur = @blur;
%Rekonstruktion ohne Vorkonditionierung
vecAA=pcg(funBlur,vecB) ; %entsprechend zu ergaenzen
AA=devec(vecAA); %Umwandlung in Matrix

subplot(2,2,3);
imagesc(AA)
title('Rekonstr. ohne Vordkond.');
colorbar
axis equal;
axis([0,255,0,255])

%Rekonstruktion mit Vorkonditionierung
c=constructC(n);
precond=@(x) precondC(c,x);
vecAA2=pcg(funBlur, vecB, 10^(-6), 100, precond); %entsprechend zu
 ergaenzen
AA2=devec(vecAA2);%Umwandlung in Matrix

subplot(2,2,4);
imagesc(AA2)
title('Rekonstr. mit Vordkond.');
colorbar
axis equal;
axis([0,255,0,255])

pcg stopped at iteration 20 without converging to the desired
 tolerance 1e-06
because the maximum number of iterations was reached.
The iterate returned (number 20) has relative residual 0.00051.
pcg stopped at iteration 100 without converging to the desired
 tolerance 1e-06
because the maximum number of iterations was reached.
The iterate returned (number 100) has relative residual 2.4e-06.
```







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