```matlab
function [u,v] = defaultImages(img,angle,scale,shift)

xshift = shift(1);
yshift = shift(2);

% make initial img square shaped
if width(img)<height(img)
  img = img(1:width(img),:);
else
  img = img(:,1:height(img));
end

% make img odd sized
if iseven(length(img))
  img = 1-blkdiag(1-img,0);
end

% make img rotatable
z = zeros(ceil(length(img)*(sqrt(2)-1)/2)+1);
u = 1-blkdiag(z,1-img,z);

% i) rotate image
v = 1-imrotate(1-u,angle*180/pi,'crop');

% ii) scale image
szN = round((scale*size(v))/2)*2+1;
v = imresize(v,szN);
z = zeros(abs(length(u)-length(v))/2);
if scale>=1
  u = 1-blkdiag(z,1-u,z);
else
  v = 1-blkdiag(z,1-v,z);
end

% iii) translate image
N = max(max(abs(xshift),abs(yshift))*1.2,round(length(u)/3));
z = zeros(N);
z1 = zeros(N-yshift,N+xshift);
z2 = zeros(N+yshift,N-xshift);
u = 1-blkdiag(z,1-u,z);
v = 1-blkdiag(z1,1-v,z2);

end
```