function watermarked\_img\_attacked = attacks(watermarked\_img, i)

% Attacks on the watermarked image

if (i==1)

watermarked\_img\_attacked = watermarked\_img; % No attack

end

if (i==2)

watermarked\_img\_attacked = conv2(single(watermarked\_img), ones(3)/9, 'same'); % average filter

watermarked\_img\_attacked = uint8(watermarked\_img\_attacked);

end

if (i==3)

temp3 = imresize(watermarked\_img,[256 256]); % code for resizing (0.5, 2)

watermarked\_img\_attacked = imresize(temp3,[512 512]);

end

if (i==4)

temp2 = imresize(watermarked\_img,[1024 1024]); % code for resizing (2, 0.5)

watermarked\_img\_attacked = imresize(temp2,[512 512]);

end

if (i==5)

watermarked\_img\_attacked = imadjust(watermarked\_img,[],[],0.6); %gamma corelation 0.6

end

if (i==6)

watermarked\_img\_attacked = imadjust(watermarked\_img,[],[],0.8); %gamma corelation 0.8

end

if (i==7)

watermarked\_img\_attacked = medfilt2(watermarked\_img,[3 3]); % Median filter [3,3]

end

if (i==8)

watermarked\_img\_attacked = imnoise(watermarked\_img,'speckle',0.01); % speckle Noise 0.01

end

if (i==9)

watermarked\_img\_attacked=imnoise(watermarked\_img,'gaussian',0,0.01); % gaussian Noise 0.01

end

if (i==10)

watermarked\_img\_attacked=imnoise(watermarked\_img,'gaussian',0,0.005); % gaussian Noise 0.005

end

if (i==11)

imwrite(watermarked\_img,'compression-1.jpg','jpeg','Quality',40); % JPEG compression(new) (Q=40)

watermarked\_img\_attacked=imread('compression-1.jpg');

end

if (i==12)

imwrite(watermarked\_img,'compression-1.jpg','jpeg','Quality',50); % JPEG compression(new) (Q=50)

watermarked\_img\_attacked=imread('compression-1.jpg');

end

if (i==13)

H3 = fspecial('gaussian',[3 3],0.5); % gaussain filter

watermarked\_img\_attacked = imfilter(watermarked\_img,H3,'replicate');

end

if (i==14)

watermarked\_img\_attacked = wiener2(watermarked\_img,[3 3]); % Wiener filter [3,3]

end

if (i==15)

H2 = fspecial('unsharp',0.2); % Sharpning 0.2

watermarked\_img\_attacked = imfilter(watermarked\_img,H2);

end

if (i==16)

temp4 = imcrop(watermarked\_img,[21 21 471 471]); % code for croping 20 pixel each side

C1=zeros(472,20);

temp4=[C1 temp4 C1];

C1=zeros(20,512);

watermarked\_img\_attacked=[C1; temp4; C1];

end

if (i==17)

temp1 = zeros(23, 23); % code for croping 5% pixel @ centre

watermarked\_img\_attacked = watermarked\_img;

watermarked\_img\_attacked(245:267,245:267) = temp1;

end

if (i==18)

temp1 = imrotate(watermarked\_img,20); % rotation 20 degree

watermarked\_img\_attacked = imresize(temp1, [512, 512]);

% imwrite(watermarked\_img\_attacked,'A11.png')

end

if (i==19)

watermarked\_img\_attacked = imnoise(watermarked\_img,'salt & pepper',0.001); % Salt and peper noise 0.001

end

if (i==20)

watermarked\_img\_attacked = imnoise(watermarked\_img,'salt & pepper',0.05); % Salt and peper noise 0.05

end

if (i==21)

watermarked\_img\_attacked = imadjust(watermarked\_img, [0 0.8], [0 1]); % contrast adjustment 20%

end

if (i==22)

H1 = fspecial('motion',10,7); % Motion Blur, Theta=7, Len=10

watermarked\_img\_attacked = imfilter(watermarked\_img,H1);

end

if (i==23)

watermarked\_img\_attacked = imtranslate(watermarked\_img,[10, 10],'FillValues',255); % Tranlation of image

end