

Practical 7

Aim: Write a program, for Image reconstruction

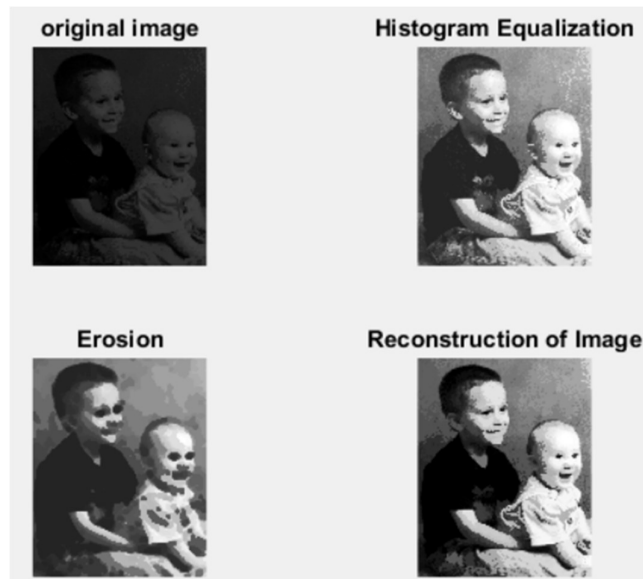
- a) Facial Images
- b) Texture Images

c) Facial Images

Code:

```
morphological_1.m  reconstruction_facial.m  reconstruction_texture.r
1 - fprintf('92000103073-Raj Chhadia');
2 - subplot(2, 2, 1);
3 -     I = imread('kids.tif');
4 -     imshow(I);
5 -     title ('original image');
6 -     subplot(2, 2, 2);
7 -     %mask = adapthisteq(I);
8 -     mask=histeq(I);
9 -     imshow(mask);
10 -    title ('Histogram Equalization');
11 -    subplot(2, 2, 3);
12 -    se = strel('disk',5);
13 -    marker = imerode(mask,se);
14 -    imshow(marker);
15 -    title ('Erosion');
16 -    subplot(2, 2, 4);
17 -    obr = imreconstruct(marker,mask);
18 -    imshow(obr,[])
19 -    title ('Reconstruction of Image');
```

Output:



d) Texture Images

Code:

```
morphological_1.m x reconstruction_facial.m x reconstruction_texture.m
1 - fprintf('92000103073-Raj Chhadia');
2 - subplot(2, 2, 1);
3 - I = imread('text.png');
4 - imshow(I);
5 - title('Original Image');
6 - subplot(2, 2, 2);
7 - marker = false(size(I));
8 - marker(13,50) = true;
9 - marker(13,94) = true;
10 - marker(13,150) = true;
11 - imshow(marker);
12 - title('Marker Image');
13 - subplot(2, 2, 3);
14 - im = imreconstruct(marker,I);
15 - imshow(im);
16 - title('Restored Image');
```

Output:

