

Practical 2

Aim: Circular Convolution expressed as Linear Convolution plus alias

Example 1

Code:

```
clc;
```

```
pramod_x=[1,2;3,4];
```

```
pramod_h=[5,6;7,8];
```

```
pramod_y=conv2(pramod_x,pramod_h);
```

```
pramod_y1=[pramod_y(:,1)+pramod_y(:,2),pramod_y(:,2)];
```

```
pramod_y2=[pramod_y1(1,:)+pramod_y1(2,:);pramod_y1(2,:)];
```

```
disp(pramod_y,"Pramod Joshi 248637 Linear Convolution Result: y=");
```

```
disp(pramod_y2,"Circular COnvolution expressed as Linear Convolution=")
```

Output:

```
Pramod Joshi 248637 Linear Convolution Result: y=
```

```
5.    16.    12.  
22.    60.    40.  
21.    52.    32.
```

```
Circular COnvolution expressed as Linear Convolution=
```

```
70.    68.  
62.    60.
```