**Product Cipher**

clear all;

clc;

a=imread('C:\Users\admin\Downloads\lena.jpg')

[m n]=size(a)

%substitution

k1=8;

for i=1:m

for j=1:n

c(i,j)=mod((a(i,j)+k1),256);

end

end

subplot(2,2,1)

imshow(a)

subplot(2,2,2)

imshow(uint8(c))

% transposition

k2=randperm(n)

%row

for i=1:m

b(i,:)=c(k2(1,i),:);

end

subplot(2,2,3)

imshow(uint8(b))

%column

for i=1:m

d(:,i)=b(:,k2(1,i));

end

subplot(2,2,4)

imshow(uint8(d))