**Various arithmetic operations on matrices**

>>a=[1 2 3;4 5 6;7 8 9]  
>>b=[9 0 7;6 5 -4;3 2 1]

>>c=a+b  
>>sum(a)  
>>a([1:2])  
>>b(2,3)  
>>a([1:3],[2:3])  
>>a(:,3)  
>>a(2:end,2:end)  
>>a(2:3,2:3)  
>>a([1:2],[1:2])  
>>a(:,2:end)

>>a([1,3],[2,3])  
>>a(end-1:end,end-1:end)

>>flip(a)  
>>a([3,2,1],[1,2,3])

>>a([3,2,1],:)

**Program to flip an image**

>>I=imread('C:\Users\GLAU\Desktop\161500207.jpg');  
>> imshow(I);  
>> whos I;  
  Name        Size                Bytes  Class    Attributes  
  
  I         294x240x3            211680  uint8

>> [x,y,z]=size(I);  
>> image(I);  
>> x\eye(size(x));  
>> y\eye(size(y));  
>> imshow(I);  
>> x  
  
x =  
  
   294  
  
>> b=I(:,end:-1:1,:);  
>> image(b);  
>> imshow(I);  
>> imshow(b);  
>> c=I(end:-1:1,:,:);  
>> image(c);  
>> d=I(:,:,end:-1:1)