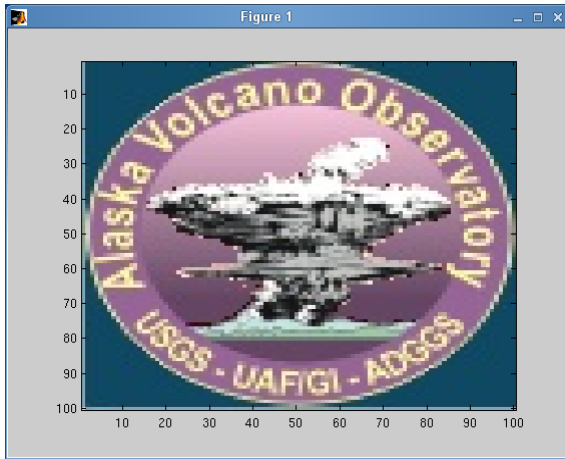
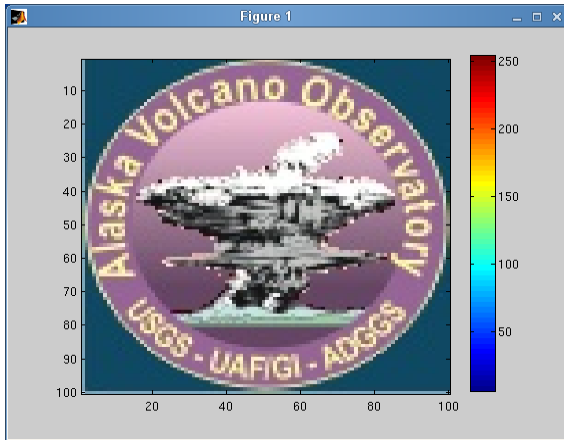


EXERCISE 1:

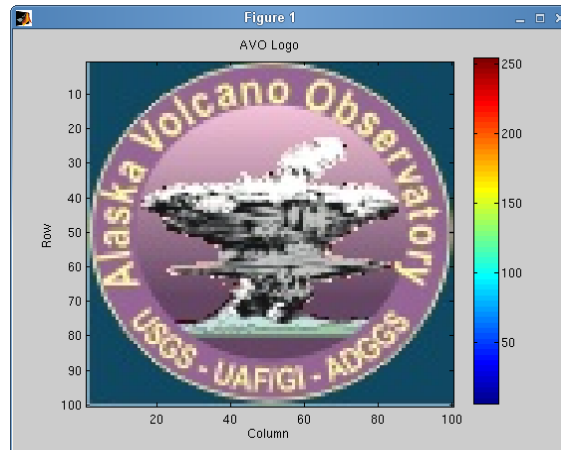
```
>> A = imread('logo_avo_transparent_new.jpg');  
>> imagesc(A)
```



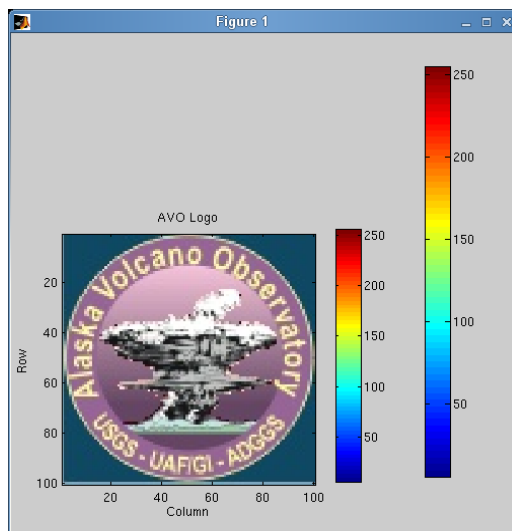
```
>> size(A)  
ans =  
    100    100     3  
>> min(min(A))  
ans(:,:,1) =  
     6  
ans(:,:,2) =  
     7  
ans(:,:,3) =  
    13  
  
>> max(max(A))  
ans(:,:,1) =  
   255  
ans(:,:,2) =  
   255  
ans(:,:,3) =  
   255  
  
>> colorbar
```



```
>> title('AVO Logo')  
>> xlabel('Column')  
>> ylabel('Row');
```



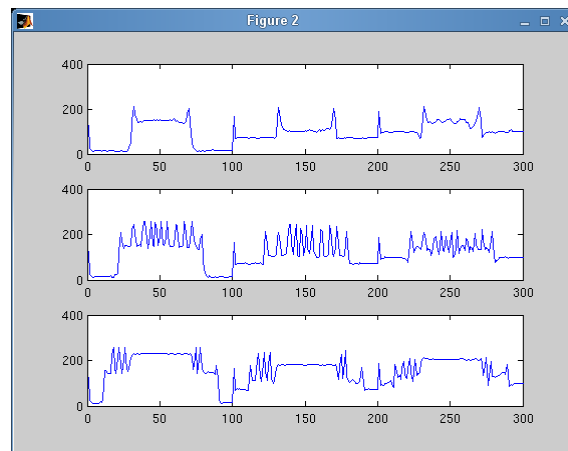
```
>> set(gcf, 'Position', [100 100 500 500]); % just moves the figure on your display & changes window size  
>> set(gca, 'position', [0.1 0.1 0.5 0.5]);
```



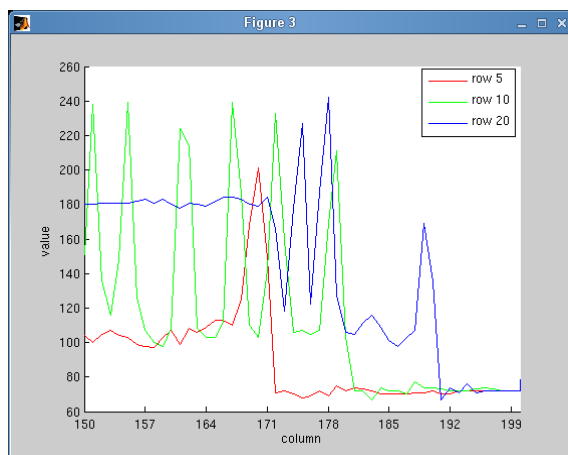
EXERCISE 2

```
>> b = A(5, :);  
>> c = A(10, :);  
>> d = A(20, :);
```

```
>> b = A(5, :);  
>> c = A(10, :);  
>> d = A(20, :);  
>> figure  
>> subplot(3,1,3), plot(b)  
>> subplot(3,1,2), plot(c)  
>> subplot(3,1,3), plot(d)
```



```
>> figure
>> hold on
>> plot(b, 'r')
>> plot(c, 'g')
>> plot(d, 'b');
>> set(gca,'XLim',[150 200])
>> set(gca,'XTick',150:7:200)
>> xlabel('column')
>> ylabel('value');
>> legend('row 5', 'row 10', 'row 20')
```



```
>> print -f3 -depsc figure3.eps
```

Exercise 3

The screenshot shows a spreadsheet with the following data:

| | A | Name Box | C | D | E |
|----|----|----------|-----------|-------------|---|
| 1 | x | X^2 | cumsum(x) | cumsum(X^2) | |
| 2 | 1 | 1 | 1 | 1 | 1 |
| 3 | 2 | 4 | 3 | 5 | |
| 4 | 3 | 9 | 6 | 14 | |
| 5 | 4 | 16 | 10 | 30 | |
| 6 | 5 | 25 | 15 | 55 | |
| 7 | 6 | 36 | 21 | 91 | |
| 8 | 7 | 49 | 28 | 140 | |
| 9 | 8 | 64 | 36 | 204 | |
| 10 | 9 | 81 | 45 | 285 | |
| 11 | 10 | 100 | 55 | 385 | |
| 12 | | | | | |

```
>> [a, t]=xlsread('file1.xls')
```

```
a =
```

```
1  1  1  1
2  4  3  5
3  9  6 14
4 16 10 30
5 25 15 55
6 36 21 91
7 49 28 140
8 64 36 204
9 81 45 285
10 100 55 385
```

```
t =
```

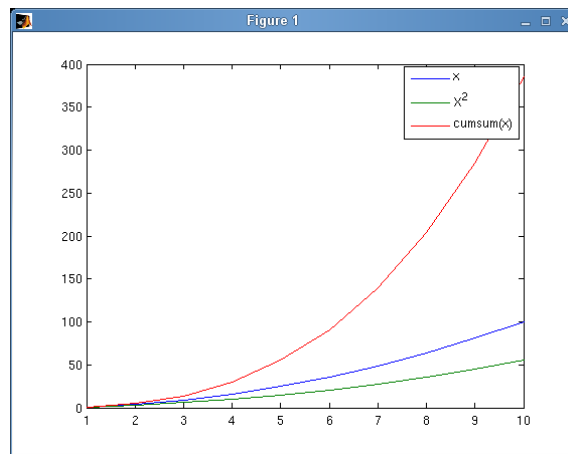
```
'x' 'X^2' 'cumsum(x)' 'cumsum(X^2)'
```

```
>> close all
```

```
>> plot(a(:,1), a(:,2), a(:,3), a(:,4), a(:,1), a(:,4));
```

```
>> legend(t)
```

```
>> print -dpng file1.png
```



```
>> pwd  
ans =  
/home/glenn/Desktop
```

(Open Firefox: <file:///home/glenn/Desktop/file1.png>)

...