Revision-MATLAB

1) %Matrices

Code :-

```
A=[1 2 3;5 6 4;7 8 9];
B=ones(3,3);
A+B
C=A*B
D=A.*C
```

Output :-

>> LAB0

ans =

2 3 4

6 7 5

8 9 10

C =

6 6 6

15 15 15

24 24 24

D =

6 12 18

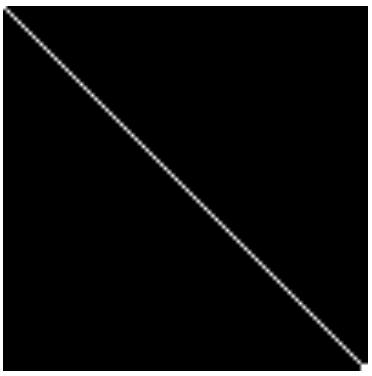
75 90 60

168 192 216

```
>> size(D)

ans =

     3     3

>> length(D)

ans =

     3

>> trace(A)

ans =

    16

>> det(A)

ans =

  -18.0000

>> rank(A)

ans =

     3
```

```
>> tril(A)

ans =

     1     0     0
     5     6     0
     7     8     9

>> triu(A)

ans =

     1     2     3
     0     6     4
     0     0     9

>> diag(A)

ans =

     1
     6
     9
>>G=  eye(3,3)

G =

     1     0     0
     0     1     0
```

```
     0     0     1
>> G=eye(100,100);
>> imshow(G)
```



```
>> H=ones(100,100);
>> J=G-H;
>> imshow(J)
```

2)

```
>> A

A =

     1     2     3
     5     6     4
     7     8     9

>> [V D] = eig(A)

V =

   -0.2401   -0.8432    0.2877
   -0.4797    0.5027   -0.7819
   -0.8439    0.1905    0.5530


D =

   15.5393         0         0
         0   -0.8703         0
         0         0    1.3310
```