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MATRIC NO: 16/ENG03/028
DEPT: CIVIL ENGINEERING
LEVEL: 200
COURSE CODE: ENG 281

ASSIGNMENT 4

1. commandwindow
clear
clc

2. INPUT:

```
commandwindow  
clear  
clc  
A=[2,3,7,9,4;3,7,9,12,5;4,8,5,6,9;5,9,2,4,5;6,2,3,7,8]  
ABDUL=det(A)  
ABDUL=transpose(A)  
format rat  
ABDUL=inv(A)  
format short  
ABDUL=inv(A)
```

OUTPUT:

A =

```
2 3 7 9 4  
3 7 9 12 5  
4 8 5 6 9  
5 9 2 4 5  
6 2 3 7 8
```

ABDUL =

-765.0000

ABDUL =

```
2 3 4 5 6  
3 7 8 9 2  
7 9 5 2 3  
9 12 6 4 7  
4 5 9 5 8
```

ABDUL =

1447/765	-1073/765	-239/765	40/51	-53/255
-67/153	50/153	8/153	-2/51	-1/51
656/255	-469/255	-22/255	13/17	-44/85
-1444/765	1121/765	8/765	-31/51	101/255
-28/45	17/45	11/45	-1/3	2/15

ABDUL =

1.8915	-1.4026	-0.3124	0.7843	-0.2078
-0.4379	0.3268	0.0523	-0.0392	-0.0196
2.5725	-1.8392	-0.0863	0.7647	-0.5176
-1.8876	1.4654	0.0105	-0.6078	0.3961
-0.6222	0.3778	0.2444	-0.3333	0.1333

3. INPUT:

```
commandwindow
clear
clc
A=[0,10,4,-2;-3,-17,1,2;1,1,1,0;8,-34,16,-10]
B=[-4;2;6;4]
C=inv(A)
X=C*B
```

OUTPUT:

A =

0	10	4	-2
-3	-17	1	2
1	1	1	0
8	-34	16	-10

B =

-4
2
6
4

C =

-0.1786	-0.1020	0.5714	0.0153
0.0357	-0.0153	0.0357	-0.0102
0.1429	0.1173	0.3929	-0.0051
-0.0357	0.1582	0.9643	-0.0612

X =

4.0000
-0.0000
2.0000
6.0000