

EXPERIMENT -3

AIM: To find the determinant of 2 X 2 Matrix.

MATRIX:

[AB	AA]
[BB	FF]

CODE:

```
ORG 0000H
MOV R0,#10H
MOV R1,#13H
MOV A,@R0
MOV B,@R1
MUL AB
MOV R2,B
MOV R3,A
INC R0
DEC R1
MOV A,@R0
MOV B,@R1
MUL AB
MOV R4,A
CLR C
MOV A,R3
SUBB A,R4
```

```
MOV R3,A
MOV A,R2
SUBB A,B
MOV R2,A
MOV R0,#14H
MOV A,R2
MOV @R0,A
INC R0
MOV A,R3
MOV @R0,A
END
```

INPUT:

Memory 1

Address: D:10H

D:0x10:	AB	AA	BB	FF	00	00
D:0x34:	00	00	00	00	00	00
D:0x58:	00	00	00	00	00	00

OUTPUT:

Memory 1										
Address:		D:10H								
D:0x10:	AB	AA	BB	FF	2E	27	00	00	00	
D:0x2C:	00	00	00	00	00	00	00	00	00	
D:0x48:	00	00	00	00	00	00	00	00	00	
D:0x64:	00	00	00	00	00	00	00	00	00	
D:0x80:	FF	07	00	00	00	00	00	00	00	
D:0x9C:	00	00	00	00	FF	00	00	00	00	
D:0xB8:	00	00	00	00	00	00	00	00	00	
D:0xD4:	00	00	00	00	00	00	00	00	00	
D:0xF0:	7C	00	00	00	00	00	00	00	00	

RESULT:

Determinant of above matrix is: (2E27)H