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/Users/bps/PycharmProjects/graph_theory/venv/bin/python /Users/bps/PycharmProjects/  
graph_theory/main.py
```

Welcome to the Graph theory Calculator

Select your choice

- 1.A matrix Analysis
- 2.Bf matrix Analysis
- 3.Qf matrix Analysis

2

2.Bf matrix Analysis

Rows in Bf matrix: 2

Columns in Bf matrix: 7

No of active elements in Bf matrix: 3

Enter The Incident Matrix (Bf matrix). First number Voltage independent elements,passive,
then dependent Voltage Source

```
-1 0 0 -1 1 0 0  
1 1 -1 1 0 1 1
```

Enter The Z matrix

```
1 0 0 0  
0 2 0 0  
0 0 1 0  
0 0 0 1
```

Enter The Independent Vg matrix:

10 2 4

Bfp					Z				Bfp_t		Vg	
[[-1 1 0 0]					[[1 0 0 0]				[[-1 1]		[[10.]	
[1 0 1 1]]					[0 2 0 0]				[1 0]		[2.]	
					[0 0 1 0]				[0 1]		[4.]]	
					[0 0 0 1]]				[0 1]]			

bfp*z*bfp_t
[[3 -1]
[-1 3]]

(bfp*z*bfp_t)^-1
[[0.375 0.125]
[0.125 0.375]]

il
[[2.75]
[-1.75]]

i
[[-4.5]
[-1.75]

```
[ 1.75]  
[-4.5 ]  
[ 2.75]  
[-1.75]  
[-1.75]]
```

Process finished with exit code 0