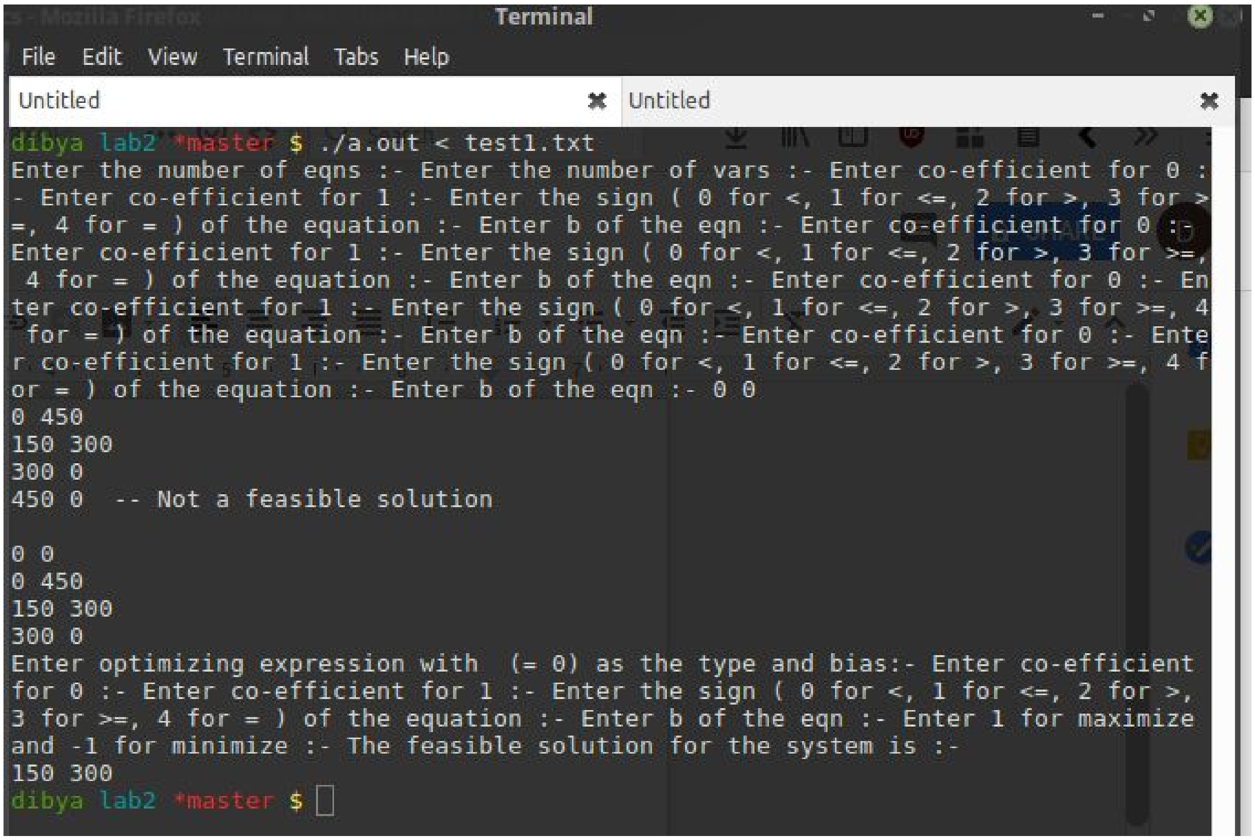
Dibya Prakash Das
16MA20017

Here’s the solution image to the first question. Notice that I put the inputs in test1.txt and redirect it to the program for brevity. I’ve done similarly for other 3 ques.

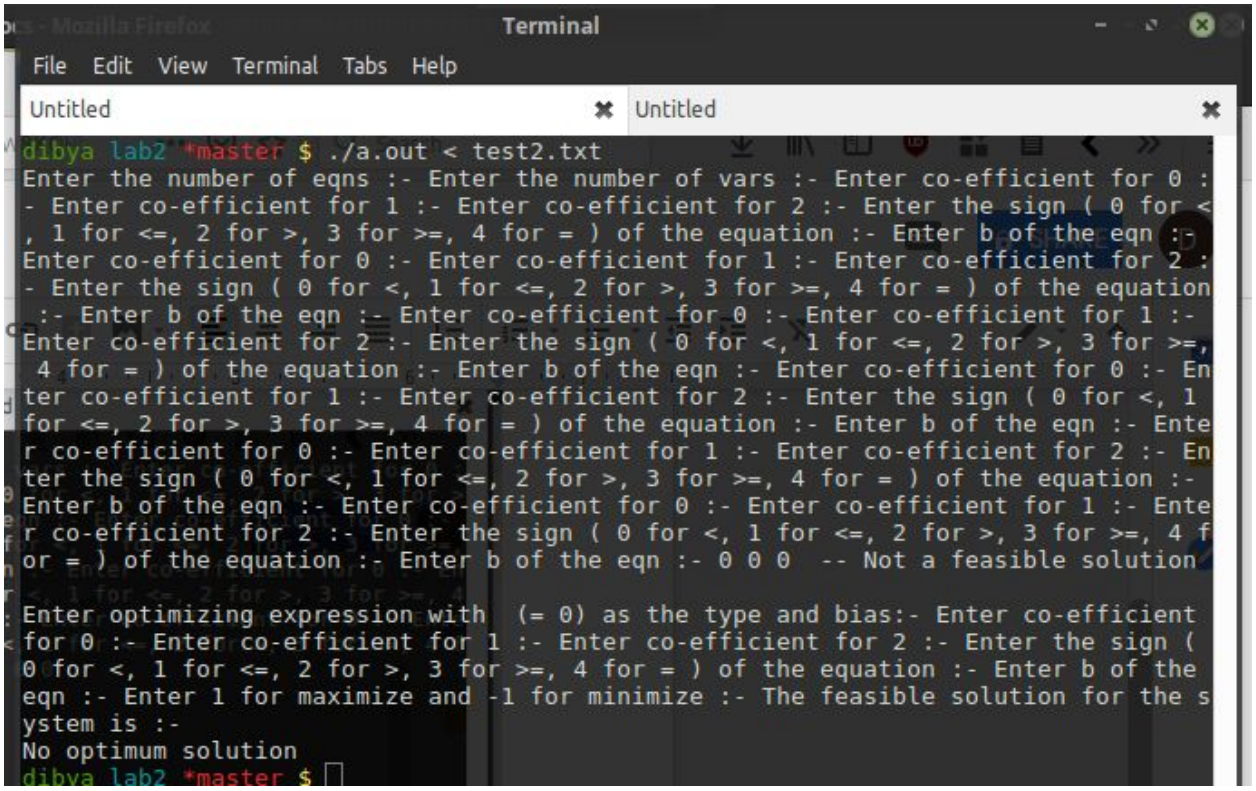
Q.1



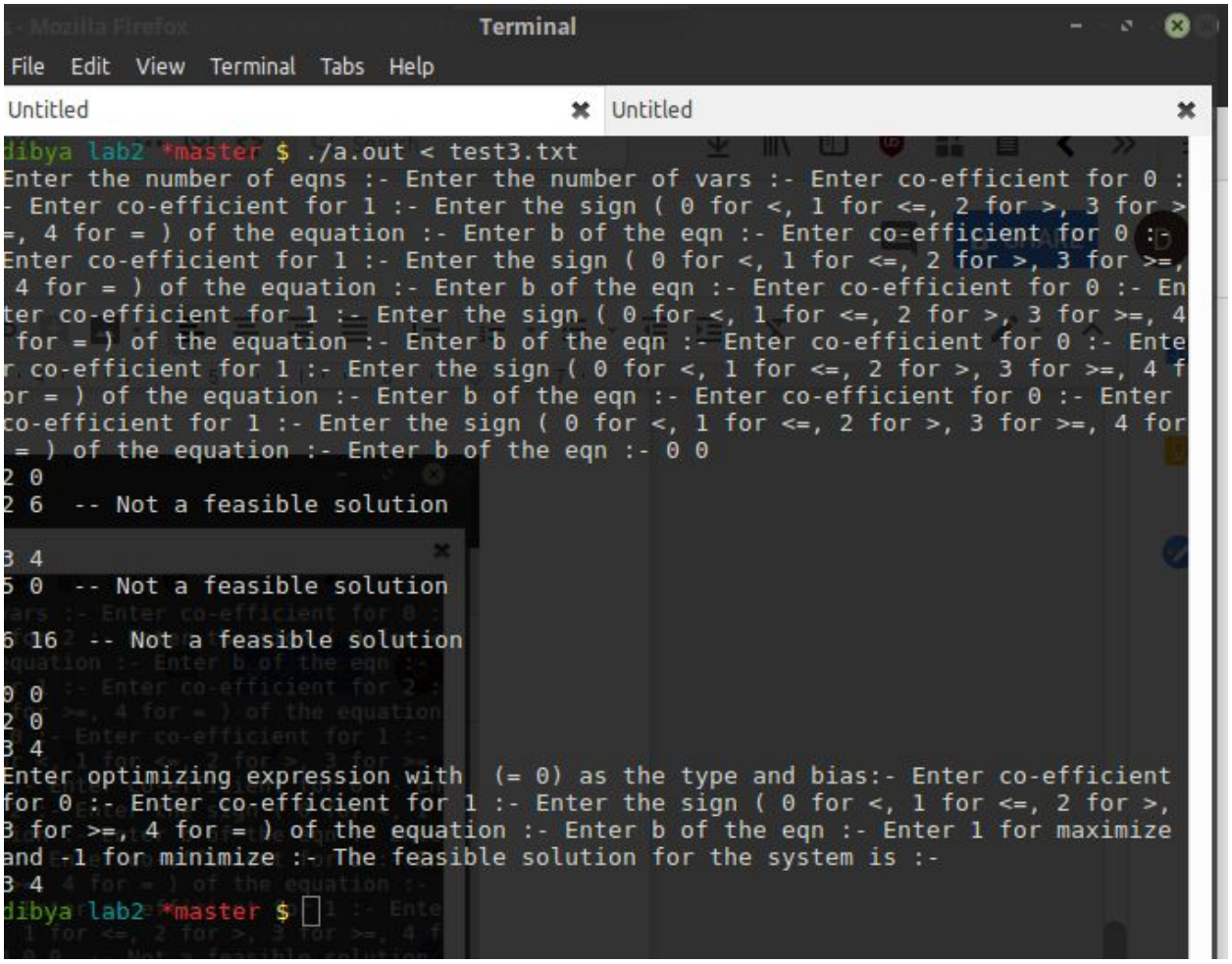
```
dibya lab2 *master $ ./a.out < test1.txt
Enter the number of eqns :- Enter the number of vars :- Enter co-efficient for 0 :
- Enter co-efficient for 1 :- Enter the sign ( 0 for <, 1 for <=, 2 for >, 3 for >
=, 4 for = ) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :-
Enter co-efficient for 1 :- Enter the sign ( 0 for <, 1 for <=, 2 for >, 3 for >=,
 4 for = ) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :- En
ter co-efficient for 1 :- Enter the sign ( 0 for <, 1 for <=, 2 for >, 3 for >=, 4
 for = ) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :- Ente
r co-efficient for 1 :- Enter the sign ( 0 for <, 1 for <=, 2 for >, 3 for >=, 4 f
or = ) of the equation :- Enter b of the eqn :- 0 0
0 450
150 300
300 0
450 0  -- Not a feasible solution

0 0
0 450
150 300
300 0
Enter optimizing expression with  (= 0) as the type and bias:- Enter co-efficient
for 0 :- Enter co-efficient for 1 :- Enter the sign ( 0 for <, 1 for <=, 2 for >,
3 for >=, 4 for = ) of the equation :- Enter b of the eqn :- Enter 1 for maximize
and -1 for minimize :- The feasible solution for the system is :-
150 300
dibya lab2 *master $
```

Q.2 No feasible solution here



Q.3


Terminal
File Edit View Terminal Tabs Help
Untitled
Untitled
dibya lab2 *master $ ./a.out < test3.txt
Enter the number of eqns :- Enter the number of vars :- Enter co-efficient for 0 :
- Enter co-efficient for 1 :- Enter the sign (0 for <, 1 for <=, 2 for >, 3 for >
=, 4 for =) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :
Enter co-efficient for 1 :- Enter the sign (0 for <, 1 for <=, 2 for >, 3 for >=,
4 for =) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :- En
ter co-efficient for 1 :- Enter the sign (0 for <, 1 for <=, 2 for >, 3 for >=, 4
for =) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :- Ente
r co-efficient for 1 :- Enter the sign (0 for <, 1 for <=, 2 for >, 3 for >=, 4 f
or =) of the equation :- Enter b of the eqn :- Enter co-efficient for 0 :- Enter
co-efficient for 1 :- Enter the sign (0 for <, 1 for <=, 2 for >, 3 for >=, 4 for
=) of the equation :- Enter b of the eqn :- 0 0
2 0
2 6 -- Not a feasible solution
3 4
5 0 -- Not a feasible solution
6 16 -- Not a feasible solution
0 0
2 0
3 4
Enter optimizing expression with (= 0) as the type and bias:- Enter co-efficient
for 0 :- Enter co-efficient for 1 :- Enter the sign (0 for <, 1 for <=, 2 for >,
3 for >=, 4 for =) of the equation :- Enter b of the eqn :- Enter 1 for maximize
and -1 for minimize :- The feasible solution for the system is :-
3 4
dibya lab2 *master $

Q.4 (Gaussian elimantion unable to converge in some solutions)
No optimum solutions thus.