

### Assignment on Big M Method

Write program to solve a problem with Big-M method with the following menus

1. Print the table of  $i^{\text{th}}$  iteration ( $i$  is user-defined)
2. Print the column of  $j^{\text{th}}$  non-basic variable of the  $i^{\text{th}}$  table.
3. Print the pivot element and min ration of the pivot row of  $i^{\text{th}}$  table.
4. Print the optimal solution.

Test your program with the following examples:

1. *Maximize*  $-x + 2y$ , *subject to*  $x + y \geq 2, -x + y \geq 1, y \leq 3, x, y \geq 0$ .
2. *Maximize*  $5x + 3y$ , *subject to*  $3x + 2y \leq 18, x + y \geq 7, 4x + y \leq 13, x, y \geq 0$ .