Graph Problems Solver

❖ Implementation :

- JAVA (Using Swing Library)
- Drag & Drop & Coding GUI
- Paint Component Method
- Collection
- Object oriented programming

❖ Description :

The Application Draws The Constrains Of The Max & Min Model Problems And Output The Graph.

❖ Methods Headers :

- public int[] point_x1()
- public int[] point_x2()
- private void jButton2ActionPerformed ()
- private void jButton1ActionPerformed()
- private void txt_consActionPerformed()

❖ Task distribution

- Hend Magdy (Coding) ➔ Section 13
- Hoda ahmed (GUI & Design) ➔ Section 13

Duality Problems Transformer

❖ Implementation :

- JAVA (Using Swing Library)
- Drag & Drop & Coding GUI
- Paint Component Method
- Object Oriented Programming

❖ Description :

The Application Transforms The prime Linear Programming Model To Its Dual Form.

❖ Methods Headers :

- private void jButton1ActionPerformed()
- private void jButton2ActionPerformed ()
- public void pp()

❖ Task distribution

- Eslam Ahmed Elkhafagy (Coding) ➔ Section 3
- Hoda Ahmed (GUI & design) ➔ Section 13

Simplex Problems Solver

❖ Implementation :

- C++ (Using Standard C++ Library)
- Console Application

❖ Description :

- The Application Solves a normal max problem with constrains Less than or Equal
- The application also solves minimum problem with constraints Less than Equal

❖ Methods Headers :

- inputMyData ()
- addSlacksVariables ()
- reversAllSigns ()
- makeMyTable ()
- reversAllSigns ()
- outputMyData ()
- solve ()
- checkForTheEnd ()
- theResultForTheCell (0

❖ Task distribution

- Amr Hassan (coding) ➔ Section 8

Assignment Problem Solver

❖ Implementation
- C++ standard library
- Depth first search algorithm
- Brute force
- C++ standard library

❖ Description
- The application solves the min and max assignment problems And outputs the their values

❖ Method headers
- Void input ()
- void genMyOptions ()

❖ Task distribution
- Moustafa Ahmed (Coding) ➔ Section 11
- Abelrahman Said Hammad (Coding) ➔ Section 6