

BSc in Information Technology Specializing Data Science
Semester 02
Lab Exercise 10
IT3071 – Machine Learning and Optimization Methods 2023
Linear Programming – Graphical Method

(01) Solve the following maximization problem using the Graphical Method.

$$\begin{aligned} \text{Maximize } Z &= f(x,y) = 3x + 2y \\ \text{subject to: } 2x + y &\leq 18 \\ 2x + 3y &\leq 42 \\ 3x + y &\leq 24 \\ x \geq 0, y &\geq 0 \end{aligned}$$

(02) Solve the above problem using Python Pulp library.