Lab 2: Mathematical programming

Question 1:

A company produces two products P1 and P2 with two machines A and B. The duration of producing each unit of P1 on machine A is 20 min and on machine B is 40 min. The duration of producing each unit of P2 on machine A is 30 min and on machine B is 50 min. The production plans for a particular week are 45 hours of work on machine A and 65 hours on machine B. The week starts with a stock of 30 units of product P1 and 65 units of P2 and with a demand of 70 units of P1 and 100 of P2.

How to plan the production in order to end the week with the maximum stock?

Question 2:

The purpose here is to use existing tools to solve mathematical programming problems. The task is to write a Python Code to find the solution for Question 1 using these tools. To do that, you will need to install Python on your machine and then install SciPy and PuLP (see steps here: https://realpython.com/linear-programming-python/). Please run your code and comment on the results.