**Part 1: Identify the Problem (MS Word; Early Submission)**

Problem 1: Manual sending of email reminder to the employees to track their time every Monday

* Some of the organizations policy is for the employees to track their hours every 1st day of the week for the whole week or in advance. This is for labor cost forecasting. Employers need to manage their budget by relying on work hours tracked by the employees for the whole week.

If I’m the person tasked to send a weekly reminder, I can automate the task in python. Instead of me doing the following tasks below every time I need to send an email:

* + Open Gmail/Outlook
  + Compose an email
  + Fill-up the ‘To’, ‘Subject’, ‘Body of the email’
  + Send the email

With the help of python, I can create a program that will automate tasks where all the necessary information is already in the program such as receiver of the email, subject of the email, body of the email, exact time on when the email will be sent. All I need to do is to run the program and wait for the output that the email is sent successfully

By automating the process, it will save me a lot of time, and it will also result in the data being consistent since I don’t need to manually put all the information again and again.

The library that can used to create email scheduling in Python is stmplib library.

Problem 2: Manual price monitoring

* As a consumer, we always check and compare the price first from the different sellers or across different sites before we buy a product. We always want to buy the same product at a lower price. To do that, we are manually doing it by opening different sites, we type down the product, prices and any other necessary information.

With python, we can easily perform web scraping to navigate through different websites, extra data and store it in the format you need instead of getting the information and creating a report manually. Some of the tools and libraries that can be used for Web Scraping are the following:

Beautiful soup, scrapy, selenium, Octoparse, ParseHub, and LXML.

**Part 2: Solve the Problem Using Python (Main Submission)**

<https://github.com/hidelarosa/COSC-1104/blob/6edf23cc5ab651954fed2db6c287c7f20ecffde3/Assignment%202/emailreminder.py>

**Part 3: Reflect on the Solution (MS Word; with Main Submission)**

* I can say that the problem I selected is easy. If you know what library to use and how to use it, you can easily create an automated scheduled email reminder in Python.

The challenging aspect of solving the problem is how to structre the program. I was able to work on it through research of the existing codes available on the internet.

I used doc.python.org and tutorialspoint.com to learn about the libraries.

The most valuable thing I learned from this assignment is how Python can be used to solve real life problems and automate repetitive processes.

The program I’ve created is an email scheduling reminder, I tested it by using real Gmail accounts. I’m confident that it works because I tested it many times and I’ve got the expected outcome.

I enjoyed it because I was able to create a program the interacts with my Gmail account and automates sending an email.