1. Add the current date to the text file today.txt as a string.

:-

import datetime

# Get the current date as a string

today = str(datetime.date.today())

# Write the string to today.txt

with open('today.txt', 'a') as file:

file.write(today + '\n')

2. Read the text file today.txt into the string today\_string

:-

with open('today.txt', 'r') as file:

today\_string = file.read()

3. Parse the date from today\_string.

:-

import datetime

# assuming today\_string is in the format 'YYYY-MM-DD'

today\_date = datetime.datetime.strptime(today\_string, '%Y-%m-%d').date()

print(today\_date)

4. List the files in your current directory

:-

import os

# Get a list of files in the current directory

files = [f for f in os.listdir('.') if os.path.isfile(f)]

# Print the list of files

print(files)

5. Create a list of all of the files in your parent directory (minimum five files should be available).

:-

import os

# get the path of the parent directory

parent\_dir\_path = os.path.abspath(os.path.join(os.getcwd(), os.pardir))

# get a list of all the files in the parent directory

file\_list = os.listdir(parent\_dir\_path)

# print the file list

print(file\_list)

['.ssh', '.profile', '.config', 'data', '.local', 'workspace', 'extensions', '.bashrc']

6. Use multiprocessing to create three separate processes. Make each one wait a random number of seconds between one and five, print the current time, and then exit.

:-

import multiprocessing

import random

import time

from datetime import datetime

def print\_time():

"""

Waits for a random number of seconds between 1 and 5, prints the current time,

and then exits.

"""

sleep\_time = random.randint(1, 5)

time.sleep(sleep\_time)

current\_time = datetime.now().strftime("%Y-%m-%d %H:%M:%S")

print(f"Current time: {current\_time}")

exit()

if \_\_name\_\_ == "\_\_main\_\_":

# Create three separate processes

for i in range(3):

p = multiprocessing.Process(target=print\_time)

p.start()

7. Create a date object of your day of birth.

:-

import datetime

date\_object = datetime.date(1995, 9, 18)

print(date\_object)

8. What day of the week was your day of birth?

:-

import datetime

date = datetime.date(1995, 9, 18)

day\_of\_week = date.strftime('%A')

print(day\_of\_week)

Monday

9. When will you be (or when were you) 10,000 days old?

:-

from datetime import datetime, timedelta

# Enter your date of birth

dob = datetime(1995, 9, 18)

# Calculate the date when you will be (or when you were) 10,000 days old

ten\_thousand\_days = dob + timedelta(days=10000)

# Print the date

print("I will be (or were) 10,000 days old on:", ten\_thousand\_days.date())

I were 10,000 days old on: 2023-02-03