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

ANS :- from datetime import date

# Get the current date

current\_date = date.today()

# Open the file in append mode and write the date as a string

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

file.write(str(current\_date))

# Optionally, print the content of the file

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

content = file.read()

print(content)

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

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

today\_string = file.read()

print(today\_string)

3. Parse the date from today\_string.

ANS :- from datetime import datetime

date\_format = '%Y-%m-%d' # Specify the format of the date in today\_string

parsed\_date = datetime.strptime(today\_string, date\_format).date()

print(parsed\_date)

4. List the files in your current directory

ANS :- import os

files = os.listdir('.')

for file in files:

print(file)

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

ANS :- import os

parent\_directory = os.path.abspath('..')

files = os.listdir(parent\_directory)

for file in files:

print(file)

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.

ANS :- import multiprocessing

import random

import time

from datetime import datetime

def worker():

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

time.sleep(wait\_time)

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

print(f"Process {multiprocessing.current\_process().name}: Current time is {current\_time}")

if \_\_name\_\_ == '\_\_main\_\_':

processes = []

for i in range(3):

p = multiprocessing.Process(target=worker)

p.start()

processes.append(p)

for p in processes:

p.join()

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

ANS :- from datetime import date

birth\_date = date(2000, 1, 1)

print(birth\_date)

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

ANS :- from datetime import date

# Replace the year, month, and day with your actual birthdate

birth\_date = date(2000, 1, 1)

# Get the day of the week as a number (0 = Monday, 1 = Tuesday, ..., 6 = Sunday)

day\_of\_week = birth\_date.weekday()

# Create a list of weekday names

weekday\_names = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']

# Get the weekday name for the day of the week

weekday\_name = weekday\_names[day\_of\_week]

print("Day of birth:", weekday\_name)

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

ANS :- from datetime import datetime, timedelta

birth\_date = datetime(2001, 10, 10)

ten\_thousand\_days = birth\_date + timedelta(days=10000)

print(ten\_thousand\_days)