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

Ans - from datetime import date

current\_date = date.today().strftime("%Y-%m-%d")

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

file.write(current\_date)

file.write("\n")

**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"

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

**4. List the files in your current directory**

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).**

import os

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

files = os.listdir(parent\_directory)

file\_list = [file for file in files if os.path.isfile(os.path.join(parent\_directory, file))]

print(file\_list)

**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 process\_func():

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

time.sleep(wait\_time)

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

print(f"Process ID: {multiprocessing.current\_process().pid} | Current Time: {current\_time}")

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

processes = []

for \_ in range(3):

p = multiprocessing.Process(target=process\_func)

processes.append(p)

p.start()

for p in processes:

p.join()

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

Ans - from datetime import date

year = 1990

month = 6

day = 15

birth\_date = date(year, month, day)

print(birth\_date)

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

Ans - from datetime import date

birth\_date = date(year=1990, month=5, day=15)

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

days\_of\_week = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday']

birth\_day\_of\_week = days\_of\_week[day\_of\_week]

print(birth\_day\_of\_week)

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

from datetime import datetime, timedelta

birth\_date = datetime(1998, 5, 31)

future\_date = birth\_date + timedelta(days=10000)

print("You will be 10,000 days old on:", future\_date.strftime("%Y-%m-%d"))