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

Answer 1:

from datetime import datetime

#Get the current date as a string

current\_date\_string = datetime.now().strftime("%Y-%m-%d")

#Write the current date to the file

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

file.write(current\_date\_string)

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

Answer 2:

#Read the contents of the file into a string

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

today\_string = file.read()

#Print the content of today\_string to verify

print(today\_string)

**3. Parse the date from today\_string.**

Answer 3:

from datetime import datetime

#Parse the date from today\_string

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

#Print the parsed date

print(parsed\_date)

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

Answer 4:

import os

#List files in the current directory

current\_directory\_files = os.listdir()

#Print the list of files

print(current\_directory\_files)

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

Answer 5:

#Get the parent directory path

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

#List files in the parent directory

parent\_directory\_files = os.listdir(parent\_directory)[:5]

# Print the list of files

print(parent\_directory\_files)

**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.**

Answer 6:

import multiprocessing

from datetime import datetime

import random

import time

def process\_function():

#Wait for a random number of seconds between 1 and 5

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

time.sleep(sleep\_time)

#Print the current time before exiting

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

print(f"Process completed at {current\_time}")

#Create three separate processes

process1 = multiprocessing.Process(target=process\_function)

process2 = multiprocessing.Process(target=process\_function)

process3 = multiprocessing.Process(target=process\_function)

#Start the processes

process1.start()

process2.start()

process3.start()

#Wait for all processes to finish

process1.join()

process2.join()

process3.join()

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

Answer 7:

from datetime import date

birth\_year = 2000

birth\_month = 1

birth\_day = 1

#Create a date object of your day of birth

dob = date(birth\_year, birth\_month, birth\_day)

print(dob)

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

Answer 8:

#Get the day of the week for the date of birth

day\_of\_week = dob.strftime("%A")

#Print the day of the week

print(f"My day of birth was on a {day\_of\_week}.")

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

Answer 9:

from datetime import timedelta

#Calculate the date 10,000 days from the date of birth

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

#Print the future date

print(f"You will be (or were) 10,000 days old on: {future\_date}")