**ANSWERS**

**Q1. Add the current date to the text file today.txt as a string.**

**Ans.** Please find below the code:

from datetime import datetime

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

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

file.write(current\_date)

**Q2. Read the text file today.txt into the string today\_string**

**Ans.** Please find below the code:

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

today\_string = file.read()

print(today\_string)

**Q3. Parse the date from today\_string.**

**Ans.** Please find below the code:

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

print(parsed\_date)

**Q4. List the files in your current directory**

**Ans.** Please find below the code:

import os

current\_directory = os.getcwd()

files\_in\_directory = os.listdir(current\_directory)

print(files\_in\_directory)

**Q5. Create a list of all of the files in your parent directory (minimum five files should be available).**

**Ans.** Please find below the code:

parent\_directory = os.path.dirname(current\_directory)

files\_in\_parent\_directory = os.listdir(parent\_directory)

print(files\_in\_parent\_directory)

**Q6. 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.** Please find below the code:

import multiprocessing

import random

import time

from datetime import datetime

def worker():

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

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

print(f"Process {multiprocessing.current\_process().name} started at {current\_time}. Waiting for {wait\_time} seconds.")

time.sleep(wait\_time)

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

print(f"Process {multiprocessing.current\_process().name} finished at {current\_time}.")

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

processes = [multiprocessing.Process(target=worker) for \_ in range(3)]

for process in processes:

process.start()

for process in processes:

process.join()

**Q7. Create a date object of your day of birth.**

**Ans.** Please find below the code:

from datetime import date

birth\_date = date(2000, 1, 1) # Replace with your actual birth date

print(birth\_date)

**Q8. What day of the week was your day of birth?**

**Ans.** Please find below the code:

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

print(f"Day of the week of birth: {day\_of\_week}")

**Q9. When will you be (or when were you) 10,000 days old?**

**Ans.** Please find below the code:

from datetime import timedelta

days\_to\_add = timedelta(days=10000)

future\_date = birth\_date + days\_to\_add

print(f"Date when you will be/were 10,000 days old: {future\_date}")