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

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

3. Parse the date from today\_string.

4. List the files in your current directory

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

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.

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

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

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

Answers

1. **Add the Current Date to a Text File**:
   * We’ll add the current date as a string to the text file today.txt.

**Python**

import datetime

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

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

file.write(current\_date)

print(f"Current date ({current\_date}) added to 'today.txt'.")

1. **Read the Contents of the File into a String**:
   * We’ll read the contents of the file today.txt into the string today\_string.

**Python**

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

today\_string = file.read()

print(f"Contents of 'today.txt': {today\_string}")

1. **Parse the Date from**today\_string:
   * We’ll parse the date from the today\_string using the datetime module.

**Python**

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

print(f"Parsed date: {parsed\_date}")

1. **List Files in the Current Directory**:
   * We’ll list the files in the current directory.

**Python**

import os

current\_directory = os.getcwd()

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

print(f"Files in current directory: {files\_in\_directory}")

1. **Create a List of Files in the Parent Directory**:
   * We’ll create a list of files in the parent directory (up one level).

**Python**

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

parent\_files = os.listdir(parent\_directory)

print(f"Files in parent directory: {parent\_files[:5]}")

1. **Use Multiprocessing to Create Three Separate Processes**:
   * We’ll create three separate processes that wait for a random number of seconds, print the current time, and then exit.

**Python**

import multiprocessing

import random

import time

def process\_function():

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

time.sleep(wait\_time)

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

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

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

for process in processes:

process.start()

for process in processes:

process.join()

1. **Create a Date Object of Your Day of Birth**:
   * We’ll create a date object representing your day of birth.

**Python**

birth\_date = datetime.date(1990, 5, 15)

print(f"Birth date: {birth\_date}")

1. **Find the Day of the Week for Your Day of Birth**:
   * We’ll determine the day of the week for your day of birth.

**Python**

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

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

1. **Calculate When You Will Be 10,000 Days Old**:
   * We’ll calculate the date when you will be (or were) 10,000 days old.

**Python**

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

print(f"Date when you will be 10,000 days old: {ten\_thousand\_days\_later}")