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

Ans1

import datetime

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

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

f.write(current\_date + '\n')

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

Ans2

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

today\_string = f.read()

3. Parse the date from today\_string.

Ans3

import datetime

date\_str = today\_string.splitlines()[0]

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

4. List the files in your current directory

Ans4

import os

files = os.listdir('.')

print(files)

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

Ans5

import os

parent\_dir = os.path.abspath(os.path.join(os.getcwd(), '..'))

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

print(parent\_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.

Ans6

import multiprocessing

import time

import random

import datetime

def worker():

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

time.sleep(wait\_time)

print(f"Process {multiprocessing.current\_process().name} waited {wait\_time} seconds and finished at {datetime.datetime.now()}")

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

processes = [multiprocessing.Process(target=worker, name=str(i)) for i in range(3)]

for process in processes:

process.start()

for process in processes:

process.join()

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

Ans7

import datetime

my\_birthdate = datetime.date(23, 1, 1997)

print(my\_birthdate)

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

Ans8

import datetime

my\_birthdate = datetime.date(23, 1, 1997)

day\_of\_week = my\_birthdate.strftime('%A')

print(day\_of\_week)

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

Ans9

import datetime

my\_birthdate = datetime.date(23, 1, 1997)

days\_to\_10k = datetime.timedelta(days=10000) - (datetime.date.today() - my\_birthdate)

print(my\_birthdate + days\_to\_10k)