**Assignment 21 Solutions**

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

import datetime

# Code to Add current date to the today.txt file

file = open('today.txt','w')

file.write(datetime.datetime.now().strftime("%d-%m-%Y"))

file.close()

# Code to Read current date from today.txt file

file = open('today.txt','r')

print(file.read())

file.close()

22-09-2021

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

file = open('today.txt','r')

today\_string = file.read()

print(today\_string)

22-09-2021

3. Parse the date from today\_string.

from datetime import datetime

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

print(parsed\_data)

2021-09-22 00:00:00

4. List the files in your current directory

import os

for folders, subfolders, files in os.walk(os.getcwd()):

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

os.listdir()

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.

import multiprocessing

import time

import random

import datetime

def procOne():

print(f'Proc\_one\_Starttime -> {datetime.datetime.now()}')

time.sleep(random.randint(1,5))

print(f'Proc\_one\_Endtime -> {datetime.datetime.now()}')

def procTwo():

print(f'Proc\_two\_Starttime -> {datetime.datetime.now()}')

time.sleep(random.randint(1,5))

print(f'Proc\_two\_Endtime -> {datetime.datetime.now()}')

def procThree():

print(f'Proc\_two\_Starttime -> {datetime.datetime.now()}')

time.sleep(random.randint(1,5))

print(f'Proc\_two\_Endtime -> {datetime.datetime.now()}')

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

p1 = multiprocessing.Process(target=procOne)

p2 = multiprocessing.Process(target=procTwo)

p3 = multiprocessing.Process(target=procThree)

p1.start()

p2.start()

p3.start()

p1.join()

p2.join()

p3.join()

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

from datetime import datetime

my\_dob = datetime.strptime('22/04/1997','%d/%m/%Y')

print(my\_dob, type(my\_dob))

1997-04-22 00:00:00 <class 'datetime.datetime'>

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

from datetime import datetime

my\_dob = datetime(1997,4,22)

my\_dob.strftime("%A")

'Tuesday'

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

from datetime import datetime, timedelta

my\_dob = datetime.strptime("22/04/1997",'%d/%m/%Y')

future\_date = my\_dob-timedelta(10000)

future\_date

datetime.datetime(1969, 12, 5, 0, 0)