PYTHON ASSIGNMENT 21

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?

SOLUTIONS

```python
import os

import datetime

import random

from multiprocessing import Process

from datetime import timedelta


# 1. Add the current date to the text file today.txt

current_date = str(datetime.date.today())

with open('today.txt', 'w') as file:
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```python
    file.write(current_date)


# 2. Read the text file today.txt into the string today_string
with open('today.txt', 'r') as file:
    today_string = file.read()


# 3. Parse the date from today_string
parsed_date = datetime.datetime.strptime(today_string, '%Y-%m-%d').date()


# 4. List the files in your current directory
current_directory_files = os.listdir('.')
print("Files in current directory:", current_directory_files)


# 5. Create a list of all files in your parent directory
parent_directory_files = os.listdir('..')[:5]
print("Files in parent directory:", parent_directory_files)


# 6. Use multiprocessing to create three separate processes
def print_current_time(process_id):
    wait_time = random.randint(1, 5)
    current_time = datetime.datetime.now().strftime('%H:%M:%S')
    print(f"Process {process_id}: Waiting for {wait_time} seconds. Current time: {current_time}")
    datetime.datetime.now().strftime('%H:%M:%S')
    process = Process(target=time_printer, args=(wait_time,))
    process.start()
```

```python
def time_printer(wait_time):

    current_time = datetime.datetime.now().strftime('%H:%M:%S')

    print(f"Process: Waited for {wait_time} seconds. Current time: {current_time}")


for i in range(3):

    print_current_time(i)


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

dob = datetime.date(2000, 1, 1)


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

day_of_week_dob = dob.strftime('%A')

print("Day of the week of my day of birth:", day_of_week_dob)


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

ten_thousand_days_old = dob + timedelta(days=10000)

print("Date when I will be 10,000 days old:", ten_thousand_days_old)
```