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

Answers.

from datetime import date

now = date.today()

now\_str = now.isoformat()

with open('today', 'wt') as output:

print(now\_str, file=output)

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

Answers.

with open('today', 'rt') as input:

today\_string = input.read()

today\_string

'2021-10-07\n'

3. Parse the date from today\_string.

Answers.

from datetime import datetime

fmt = '%Y-%m-%d\n'

datetime.strptime(today\_string, fmt)

datetime.datetime(2021, 10, 7, 0, 0)

4. List the files in your current directory

Answers.

import os

os.listdir('.')

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

Answers.

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.

Answers.

import multiprocessing

from datetime import datetime

from time import sleep

import random

def now(seconds):

sleep(seconds)

print('wait', seconds, 'seconds, time is', datetime.utcnow())

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

for n in range(3):

seconds = random.random()

proc = multiprocessing.Process(target=now, args=(seconds,))

proc.start()

wait 0.2554782362108349 seconds, time is 2021-10-07 09:50:55.241749

wait 0.356868395530774 seconds, time is 2021-10-07 09:50:55.353776

wait 0.8478331564160926 seconds, time is 2021-10-07 09:50:55.829791

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

Answers.

my\_day = date(1999, 6, 16)

my\_day

datetime.date(1999, 6, 16)

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

Answers.

my\_day.weekday()

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

Answers.

from datetime import timedelta

thousand\_day = my\_day + timedelta(days=10000)

thousand\_day