Write a Pandas program to create   
a) Datetime object for Jan 15 2012. b) Specific date and time of 9:20 pm. c) Local date and time.  
d) A date without time. e) Current date. f) Time from a datetime. g) Current local time.

import datetime

from datetime import datetime

print("Datetime object for Jan 11 2012:")

print(datetime(2012, 1, 11))

print("\nSpecific date and time of 9:20 pm")

print(datetime(2011, 1, 11, 21, 20))

print("\nLocal date and time:")

print(datetime.now())

print("\nA date without time: ")

print(datetime.date(datetime(2012, 5, 22)))

print("\nCurrent date:")

print(datetime.now().date())

print("\nTime from a datetime:")

print(datetime.time(datetime(2012, 12, 15, 18, 12)))

print("\nCurrent local time:")

print(datetime.now().time())

Write a Pandas program to create a) a specific date using timestamp. b) date and time using timestamp. c) a time adds in the current local date using timestamp. d) current date and time using timestamp.

import pandas as pd

#from datetime import datetime

print("\nA specific date using timestamp:")

print(pd.Timestamp('2016-11-10'))

print("\nDate and time using timestamp:")

print(pd.Timestamp('2012-05-03 11:30'))

print("\nA time adds in the current local date using timestamp:")

print(pd.Timestamp('11:30'))

print("\nCurrent date and time using timestamp:")

print(pd.Timestamp("now"))

Write a Pandas program to create a date from a given year, month, day and another date from a given string formats

from datetime import datetime

date1 = datetime(year=2020, month=12, day=25)

print("Date from a given year, month, day:")

print(date1)

from dateutil import parser

date2 = parser.parse("1st of January, 2021")

print("\nDate from a given string formats:")

print(date2)

Write a Pandas program to print the day after and before a specified date. Also print the days between two given dates.

import pandas as pd

import datetime

from datetime import datetime, date

today = datetime(2012, 10, 30)

print("Current date:", today)

tomorrow = today + pd.Timedelta(days=1)

print("Tomorrow:", tomorrow)

yesterday = today - pd.Timedelta(days=1)

print("Yesterday:", yesterday)

date1 = datetime(2016, 8, 2)

date2 = datetime(2016, 7, 19)

print("\nDifference between two dates: ",(date1 - date2))

Write a Pandas program to create a time-series with two index labels and random values. Also print the type of the index

import pandas as pd

import numpy as np

import datetime

from datetime import datetime, date

dates = [datetime(2011, 9, 1), datetime(2011, 9, 2)]

print("Time-series with two index labels:")

time\_series = pd.Series(np.random.randn(2), dates)

print(time\_series)

print("\nType of the index:")

print(type(time\_series.index))

Write a Pandas program to create a time-series from a given list of dates as strings.

import pandas as pd

import numpy as np

import datetime

from datetime import datetime, date

dates = ['2014-08-01','2014-08-02','2014-08-03','2014-08-04']

time\_series = pd.Series(np.random.randn(4), dates)

print(time\_series)

Write a Pandas program to create a time series object that has time indexed data. Also select the dates of same year and select the dates between certain dates

import pandas as pd

index = pd.DatetimeIndex(['2011-09-02', '2012-08-04',

'2015-09-03', '2010-08-04',

'2015-03-03', '2011-08-04',

'2015-04-03', '2012-08-04'])

s\_dates = pd.Series([0, 1, 2, 3, 4, 5, 6, 7], index=index)

print("Time series object with indexed data:")

print(s\_dates)

print("\nDates of same year:")

print(s\_dates['2015'])

print("\nDates between 2012-01-01 and 2012-12-31")

print(s\_dates['2012-01-01':'2012-12-31'])

Write a Pandas program to create a date range using a startpoint date and a number of periods

import pandas as pd

date\_range = pd.date\_range('2020-01-01', periods=45)

print("Date range of perods 45:")

print(date\_range)

Write a Pandas program to create a whole month of dates in daily frequencies. Also find the maximum, minimum timestamp and indexs

import pandas as pd

dates = pd.Series(pd.date\_range('2020-12-01',periods=31, freq='D'))

print("Month of December 2020:")

print(dates)

dates = pd.Series(pd.date\_range('2020-12-01',periods=31, freq='D'))

print("\nMaximum date: ", dates.max())

print("Minimum date: ", dates.min())

print("Maximum index: ", dates.idxmax())

print("Minimum index: ", dates.idxmin())

Write a Pandas program to create a time series using three months frequency.

import pandas as pd

time\_series = pd.date\_range('1/1/2021', periods = 36, freq='3M')

print("Time series using three months frequency:")

print(time\_series)