1.Write a Python program to convert a string to datetime.

from datetime import datetime

date\_object = datetime.strptime('Jul 1 2014 2:43PM', '%b %d %Y %I:%M%p')

print(date\_object)

**2.** Write a Python program to determine whether a given year is a leap year.

3. Write a Python program to print yesterday, today, tomorrow.

import datetime

today = datetime.date.today()

yesterday = today - datetime.timedelta(days = 1)

tomorrow = today + datetime.timedelta(days = 1)

print('Yesterday : ',yesterday)

print('Today : ',today)

print('Tomorrow : ',tomorrow)

4. Write a Python program to calculate the number of days between two dates.

import datetime

from datetime import date

def differ\_days(date1, date2):

a = date1

b = date2

return (a-b).days

print()

print(differ\_days((date(2016,10,12)), date(2015,12,10)))

print(differ\_days((date(2016,3,23)), date(2017,12,10)))

print()

5. Write a Python program to calculate an age in years.

from datetime import date

def calculate\_age(dtob):

today = date.today()

return today.year - dtob.year - ((today.month, today.day) < (dtob.month, dtob.day))

print()

print(calculate\_age(date(2006,10,12)))

print(calculate\_age(date(1989,1,12)))

print()

6. Write a Python program to get time values with components using local time and gmtime.

import time

def time\_struct(s):

print(' tm\_year :', s.tm\_year)

print(' tm\_mon :', s.tm\_mon)

print(' tm\_mday :', s.tm\_mday)

print(' tm\_hour :', s.tm\_hour)

print(' tm\_min :', s.tm\_min)

print(' tm\_sec :', s.tm\_sec)

print(' tm\_wday :', s.tm\_wday)

print(' tm\_yday :', s.tm\_yday)

print(' tm\_isdst:', s.tm\_isdst)

print('\nlocaltime:')

time\_struct(time.localtime())

print('\ngmtime:')

time\_struct(time.gmtime())

7. Write a Python program to get the dates 30 days before and after today.

from datetime import date, timedelta

current\_date = date.today().isoformat()

days\_before = (date.today()-timedelta(days=30)).isoformat()

days\_after = (date.today()+timedelta(days=30)).isoformat()

print("\nCurrent Date: ",current\_date)

print("30 days before current date: ",days\_before)

print("30 days after current date : ",days\_after)

8. Write a Python program to select all the Sundays in a specified year.

from datetime import date, timedelta

def all\_sundays(year):

# January 1st of the given year

dt = date(year, 1, 1)

# First Sunday of the given year

dt += timedelta(days = 6 - dt.weekday())

while dt.year == year:

yield dt

dt += timedelta(days = 7)

for s in all\_sundays(2020):

print(s)

9.Write a Python program print the calendar of the Year 2022