- 1. 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.
- 2. 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.
- **3.** Write a Pandas program to create a date from a given year, month, day and another date from a given string formats.
- **4.** Write a Pandas program to print the day after and before a specified date. Also print the days between two given dates.
- **5.** Write a Pandas program to create a time-series with two index labels and random values. Also print the type of the index.
- **6.** Write a Pandas program to create a time-series from a given list of dates as strings.
- **7.** 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.
- **8.** Write a Pandas program to create a date range using a startpoint date and a number of periods.
- **9.** Write a Pandas program to create a whole month of dates in daily frequencies. Also find the maximum, minimum timestamp and indexs.
- **10.** Write a Pandas program to create a time series using three months frequency.
- **11.** Write a Pandas program to create a sequence of durations increasing by an hour.
- **12.** Write a Pandas program to convert year and day of year into a single datetime column of a dataframe.
- **13.** Write a Pandas program to create a series of Timestamps from a DataFrame of integer or string columns. Also create a series of Timestamps using specified

columns.

- **14.** Write a Pandas program to check if a day is a business day (weekday) or not.
- **15.** Write a Pandas program to get a time series with the last working days of each month of a specific year.
- **16.** Write a Pandas program to create a time series combining hour and minute.
- **17.** Write a Pandas program to convert unix/epoch time to a regular time stamp in UTC. Also convert the said timestamp in to a given time zone.
- **18.** Write a Pandas program to create a time series object with a time zone.
- **19.** Write a Pandas program to remove the time zone information from a Time series data.
- **20.** Write a Pandas program to subtract two timestamps of same time zone or different time zone.
- 21. Write a Pandas program to calculate all Thursdays between two given days.
- **22.** Write a Pandas program to find the all the business quarterly begin and end dates of a specified year.
- **23.** Write a Pandas program to generate sequences of fixed-frequency dates and time spans intervals.
- **24.** Write a Pandas program to generate time series combining day and intraday offsets intervals.
- **25.** Write a Pandas program to extract the day name from a specified date. Add 2 days and 1 business day with the specified date.
- **26.** Write a Pandas program to convert integer or float epoch times to Timestamp and DatetimeIndex.
- **27.** Write a Pandas program to calculate one, two, three business day(s) from a specified date. Also find the next business month end from a specific date.
- **28.** Write a Pandas program to create a period index represent all monthly boundaries of a given year. Also print start and end time for each period object in the said index.
- **29.** Write a Pandas program create a series with a PeriodIndex which represents all the calendar month periods in 2029 and 2031. Also print the values for all periods in 2030.

Note: PeriodIndex is an immutable ndarray holding ordinal values indicating regular periods in time such as particular years, quarters, months, etc.

30. Write a Pandas program to generate holidays between two dates using the US federal holiday calendar.

- **31.** Write a Pandas program to create a monthly time period and display the list of names in the current local scope.
- **32.** Write a Pandas program to create a yearly time period from a specified year and display the properties of this period.