In this assignment, Python and SQLAlchemy is used in data exploration. In addition to SQLAlchemy ORM queries SQL queries were also used to perform same analysis. Pandas, Numpy and Matplotlib was also used. Once this primary analysis was completed, FLASK API was used on the above queries to develop an App.

For date, format to be used is YYYY-MM-DD. Below is description from the assignment for the APP

1. /
   * Start at the homepage.
   * List all the available routes.
2. /api/v1.0/precipitation
   * Convert the query results from your precipitation analysis (i.e. retrieve only the last 12 months of data) to a dictionary using date as the key and prcp as the value.
   * Return the JSON representation of your dictionary.
3. /api/v1.0/stations
   * Return a JSON list of stations from the dataset.
4. /api/v1.0/tobs
   * Query the dates and temperature observations of the most-active station for the previous year of data.
   * Return a JSON list of temperature observations for the previous year.
5. /api/v1.0/<start> and /api/v1.0/<start>/<end>
   * Return a JSON list of the minimum temperature, the average temperature, and the maximum temperature for a specified start or start-end range.
   * For a specified start, calculate TMIN, TAVG, and TMAX for all the dates greater than or equal to the start date.
   * For a specified start date and end date, calculate TMIN, TAVG, and TMAX for the dates from the start date to the end date, inclusive.