Scooter Rental Demand Prediction

You are provided hourly rental data spanning two years (2011 and 2012) for a scooter rental store.

The fields in *Scooter Rental Dataset.csv* are:

- datetime – hourly date and timestamp
- season
  - 1: Winter
  - 2: Spring
  - 3: Summer
  - 4: Autumn
- holiday - whether the day is considered a holiday
- workingday - whether the day is neither a weekend nor a holiday
- weather
  - 1: Clear, Few clouds, Partly cloudy
  - 2: Mist + Cloudy, Mist + Broken clouds, Mist + Few clouds, Mist
  - 3: Light Snow, Light Rain + Thunderstorm + Scattered clouds, Light Rain + Scattered clouds
  - 4: Heavy Rain + Hail + Thunderstorm + Mist, Snow + Fog
- temp - temperature in Celsius
- atemp - "feels like" temperature in Celsius
- humidity - relative humidity
- windspeed - wind speed
- count - number of total rentals

Questions:

1. Predict the total count of scooters rented during each hour for the week commencing on 24th December 2012 (dataset contains the predictions for the independent variables like weather, temperature, humidity, windspeed etc.)
2. Predict whether high demand will occur within 7 days