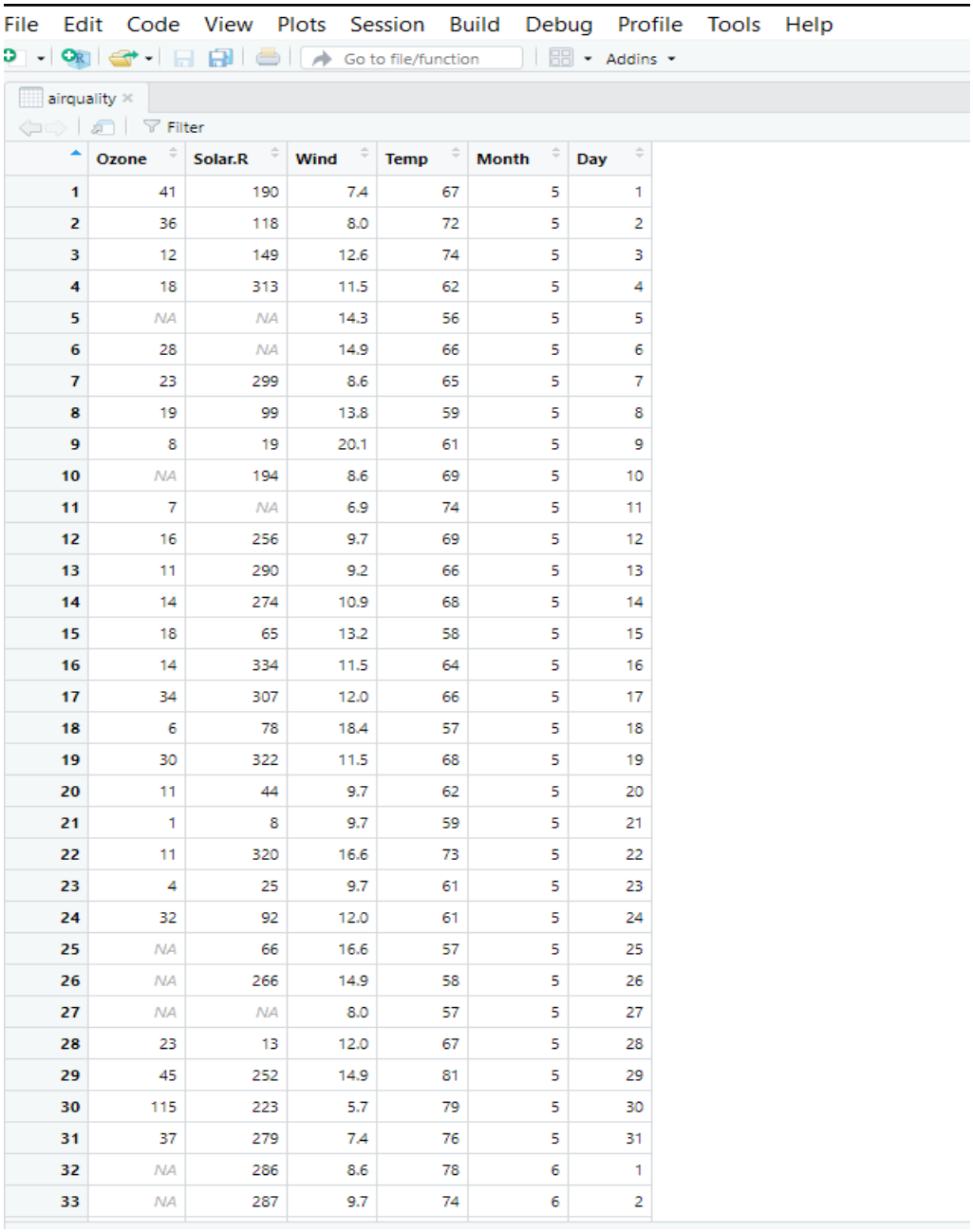
LAB-1

Data Visualization

Name: Koduri Gokul

Reg.no:19bcd7006

Dataset:



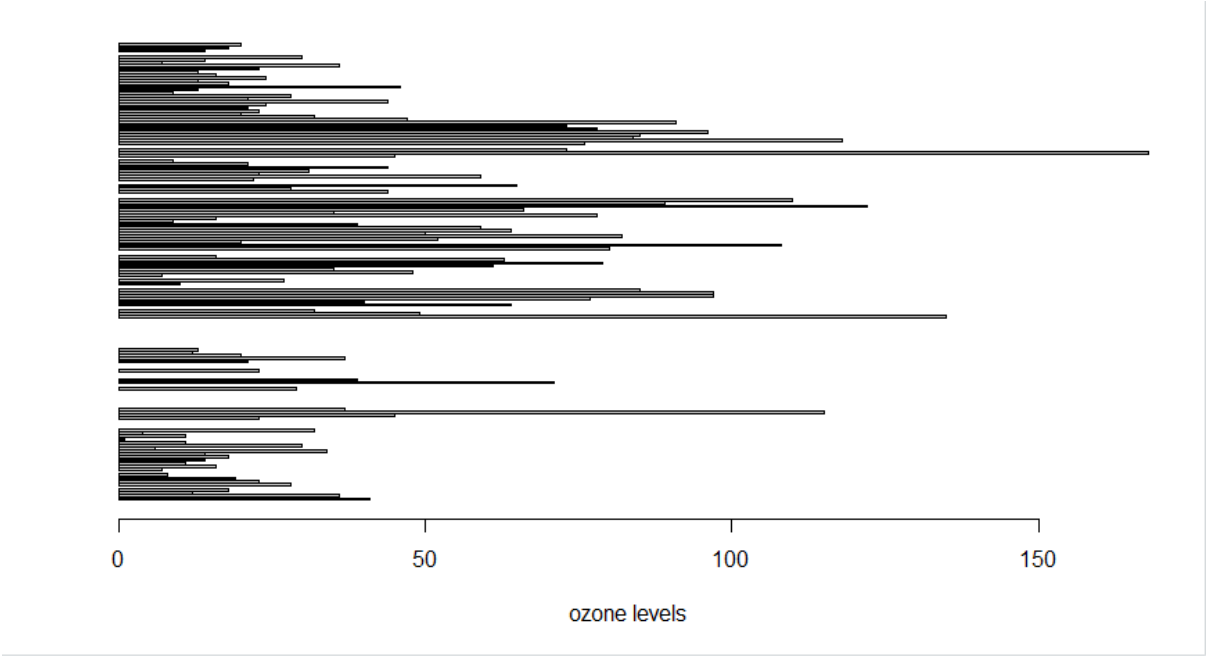
	Ozone	Solar.R	Wind	Temp	Month	Day
1	41	190	7.4	67	5	1
2	36	118	8.0	72	5	2
3	12	149	12.6	74	5	3
4	18	313	11.5	62	5	4
5	NA	NA	14.3	56	5	5
6	28	NA	14.9	66	5	6
7	23	299	8.6	65	5	7
8	19	99	13.8	59	5	8
9	8	19	20.1	61	5	9
10	NA	194	8.6	69	5	10
11	7	NA	6.9	74	5	11
12	16	256	9.7	69	5	12
13	11	290	9.2	66	5	13
14	14	274	10.9	68	5	14
15	18	65	13.2	58	5	15
16	14	334	11.5	64	5	16
17	34	307	12.0	66	5	17
18	6	78	18.4	57	5	18
19	30	322	11.5	68	5	19
20	11	44	9.7	62	5	20
21	1	8	9.7	59	5	21
22	11	320	16.6	73	5	22
23	4	25	9.7	61	5	23
24	32	92	12.0	61	5	24
25	NA	66	16.6	57	5	25
26	NA	266	14.9	58	5	26
27	NA	NA	8.0	57	5	27
28	23	13	12.0	67	5	28
29	45	252	14.9	81	5	29
30	115	223	5.7	79	5	30
31	37	279	7.4	76	5	31
32	NA	286	8.6	78	6	1
33	NA	287	9.7	74	6	2

Bar plot:

Code:

```
> barplot(airquality$Ozone,
+         main = 'Ozone Concenteration in air',
+         xlab = 'ozone levels', horiz = TRUE)
>
```

Output:

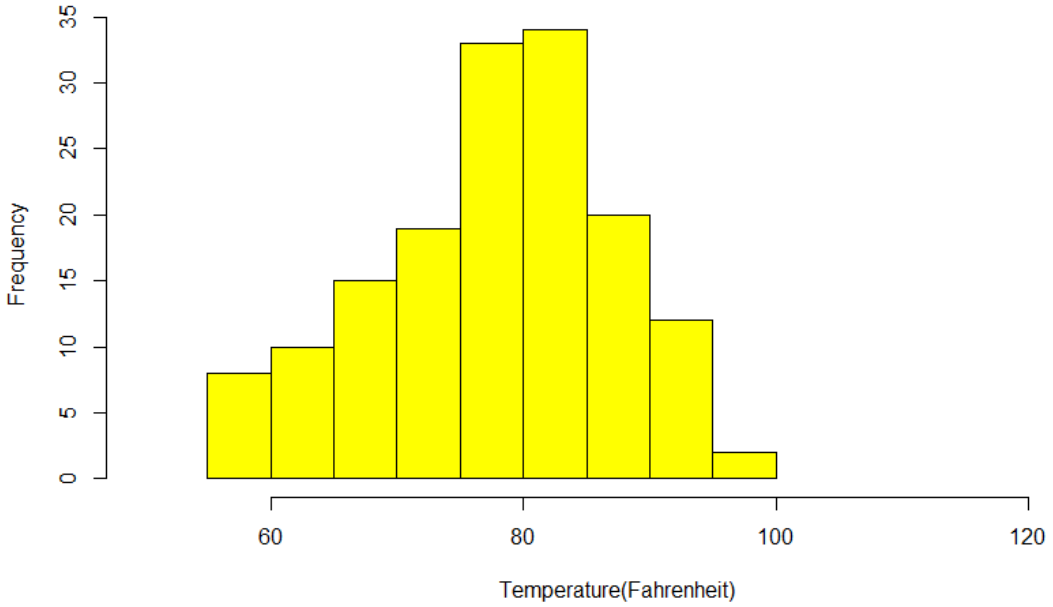


Histogram:

Code:

```
>
> hist(airquality$Temp, main ="La Guardia Airport's\
+ Maximum Temperature(Daily)",
+       xlab ="Temperature(Fahrenheit)",
+       xlim = c(50, 125), col ="yellow",
+       freq = TRUE)
>
```

Code:

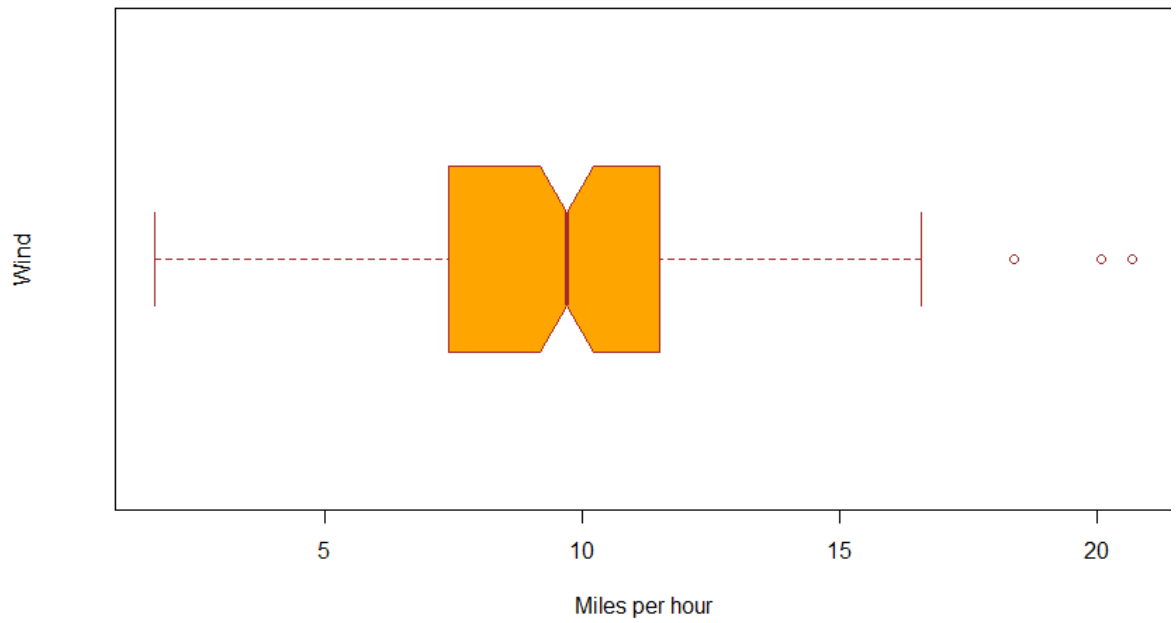


Box plot:

Code:

```
>
> boxplot(airquality$wind, main = "Average wind speed\
+ at La Guardia Airport",
+          xlab = "Miles per hour", ylab = "Wind",
+          col = "orange", border = "brown",
+          horizontal = TRUE, notch = TRUE)
>
>
```

Output:

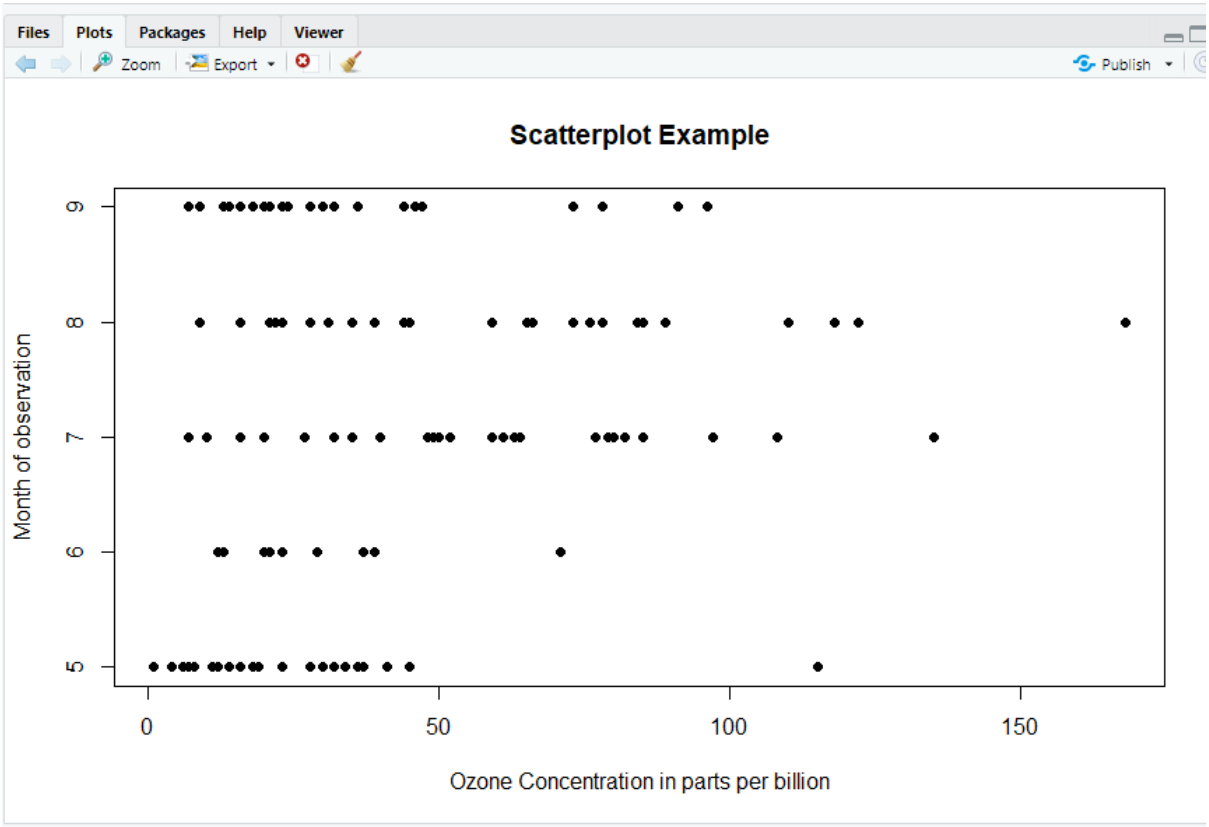


Scatter plot:

Code:

```
> plot(airquality$Ozone, airquality$Month,
+       main ="Scatterplot Example",
+       xlab ="Ozone Concentration in parts per billion",
+       ylab =" Month of observation ", pch = 19)
>
>
```

Output:

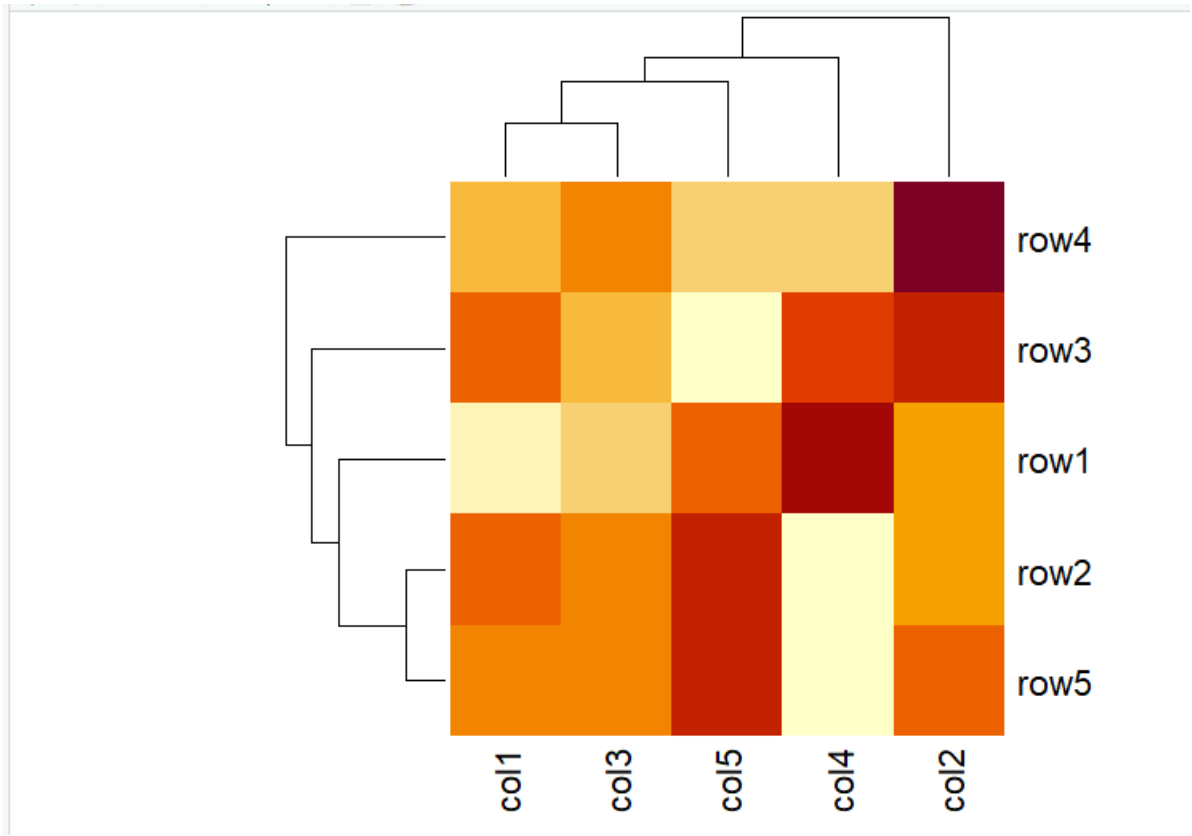


Heat map:

Code:

```
> # Create example data
> data <- matrix(rnorm(50, 0, 5), nrow = 5, ncol = 5)
>
> # Column names
> colnames(data) <- paste0("col", 1:5)
> rownames(data) <- paste0("row", 1:5)
>
> # Draw a heatmap
> heatmap(data)
```

Output:


row4
row3
row1
row2
row5
col1
col3
col5
col4
col2