

# Road\_condition\_State\_Based.R

shaun

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```
library("dplyr")
```

```
##
```

```
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
```

```
##
```

```
## filter, lag
```

```
## The following objects are masked from 'package:base':
```

```
##
```

```
## intersect, setdiff, setequal, union
```

```
library(ggplot2)
```

```
setwd("C://Users/shaun/OneDrive/Desktop/Academics/Sem-5/Foundation of Data Analytics 3505/J-comp")
```

```
# Accidents due to vehicular defects
```

```
road_c2 = read.csv("Road_condition.csv")
```

```
road_c2 = road_c2[1:36,2:98]
```

```
road_c2 = road_c2 %>% arrange(State..UT)
```

```
road_c2 = road_c2[-c(9,6,10,8),]
```

```
View(road_c2)
```

```
sum(is.na(road_c2))
```

```
## [1] 0
```

```
dim(road_c2)
```

```
## [1] 32 97
```

```
rownames(road_c2) <- road_c2$State..UT
```

```
states = seq(1:32)
```

```
road_c2$Total_2014 = 0
```

```
road_c2$Total_2016 = 0
```

```
tot_acc_14 = seq(2,73,3)
```

```
tot_acc_16 = seq(74,97,3)
```

```
tot_kil_14 = seq(3,73,3)
```

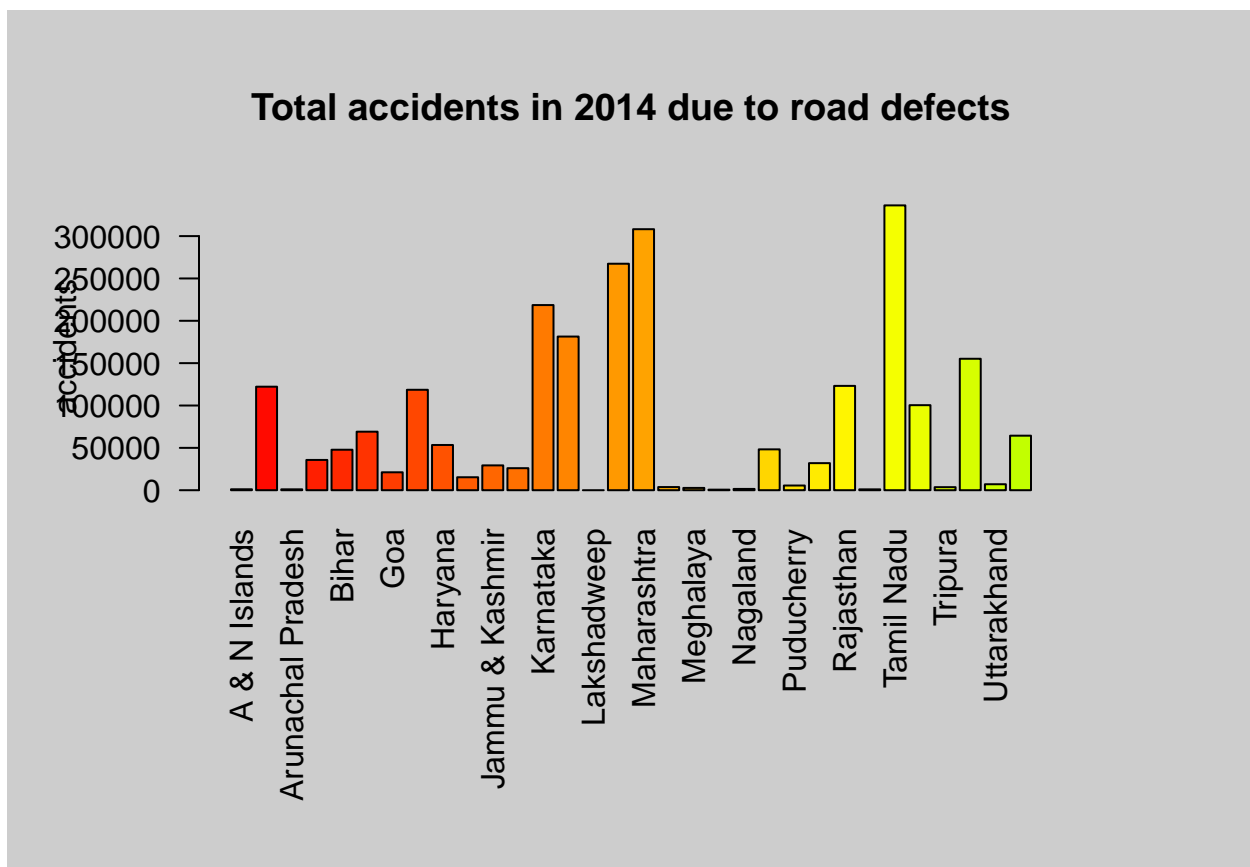
```
tot_kil_16 = seq(75,97,3)
```

```

tot_inj_14 = seq(4,73,3)
tot_inj_16 = seq(76,97,3)
for (i in states)
{
  road_c2$Total_2014_Acc[i] = sum(road_c2[i,tot_acc_14])
  road_c2$Total_2016_Acc[i] = sum(road_c2[i,tot_acc_16])
  road_c2$Total_2014_Kil[i] = sum(road_c2[i,tot_kil_14])
  road_c2$Total_2016_Kil[i] = sum(road_c2[i,tot_kil_16])
  road_c2$Total_2014_Inj[i] = sum(road_c2[i,tot_inj_14])
  road_c2$Total_2016_Inj[i] = sum(road_c2[i,tot_inj_16])
}

par(mar = c(10,5,5,5), bg="#CDCDCD")
barplot(road_c2$Total_2014_Acc, main = "Total accidents in 2014 due to road defects",ylab="accidents",

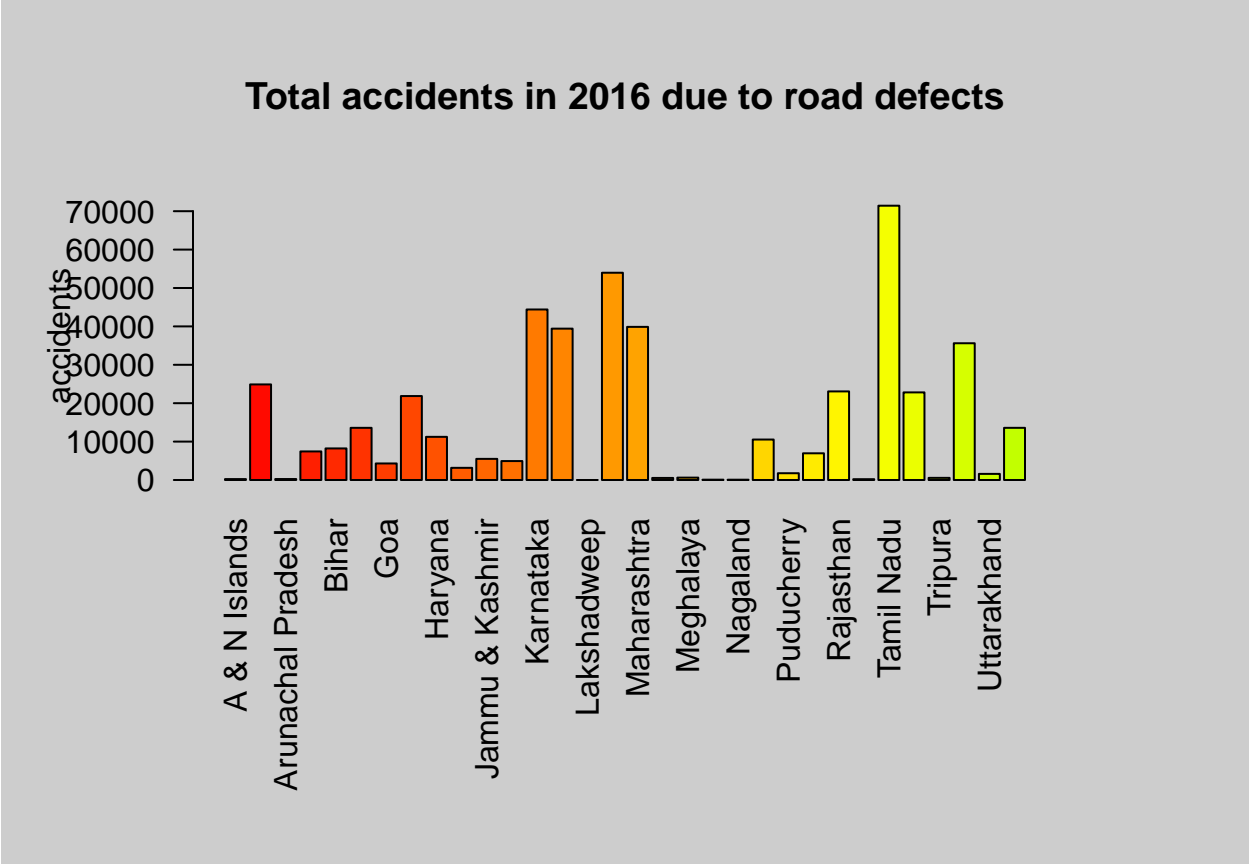
```



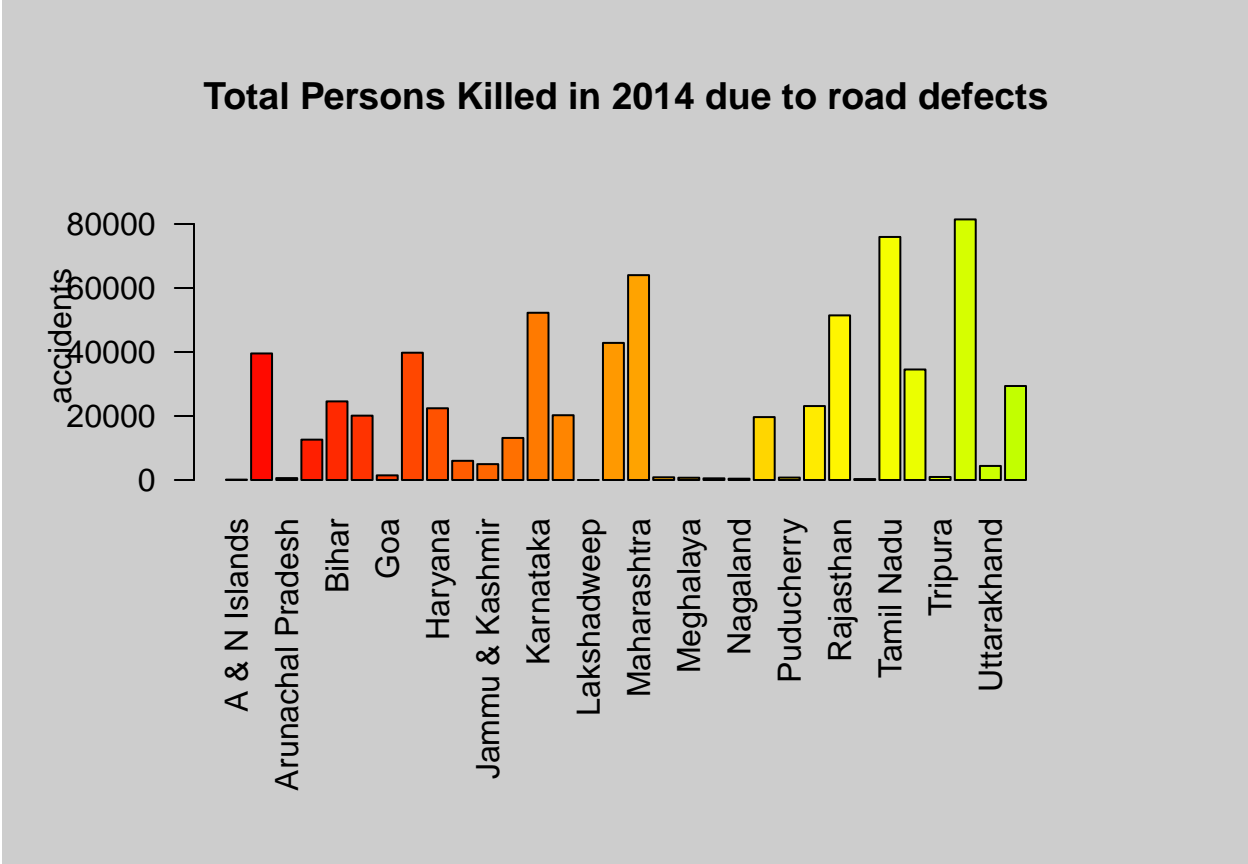
```

barplot(road_c2$Total_2016_Acc, main = "Total accidents in 2016 due to road defects",ylab="accidents",

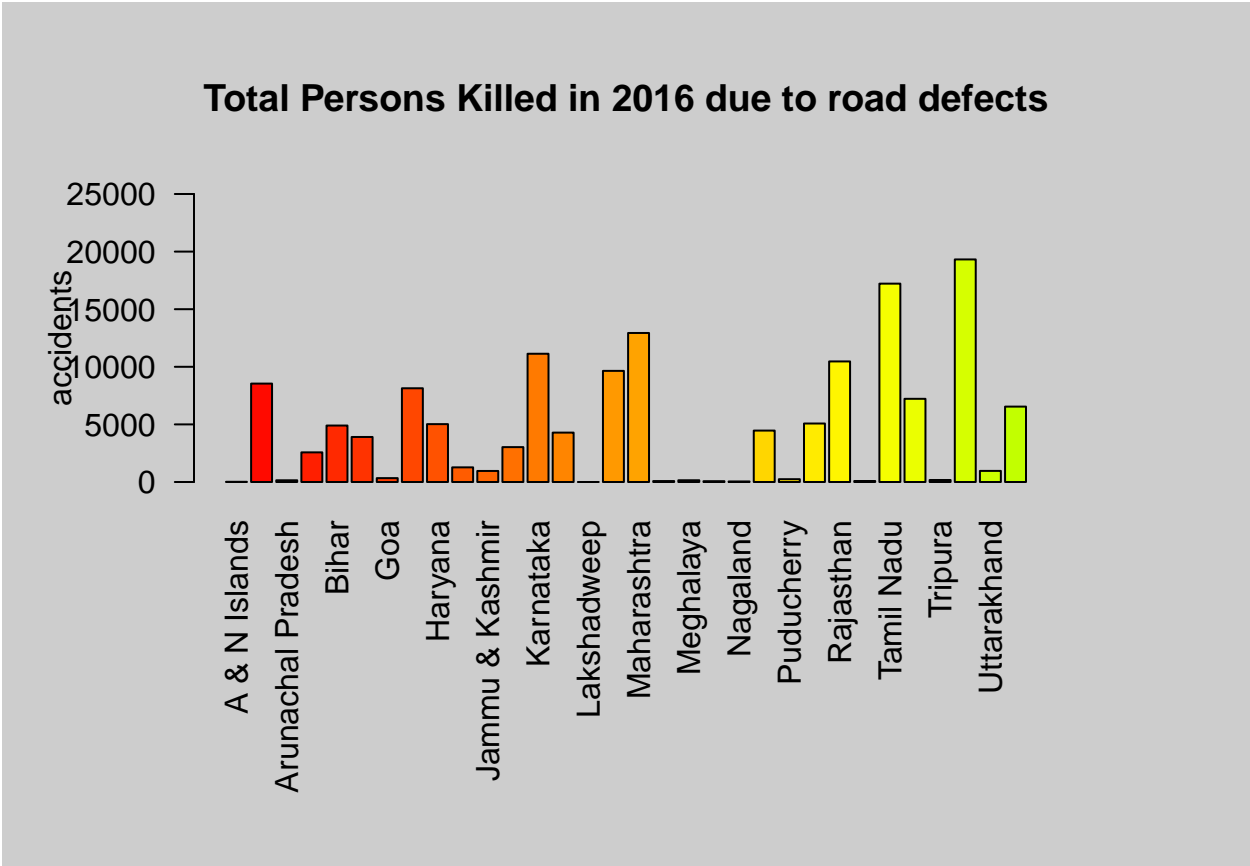
```



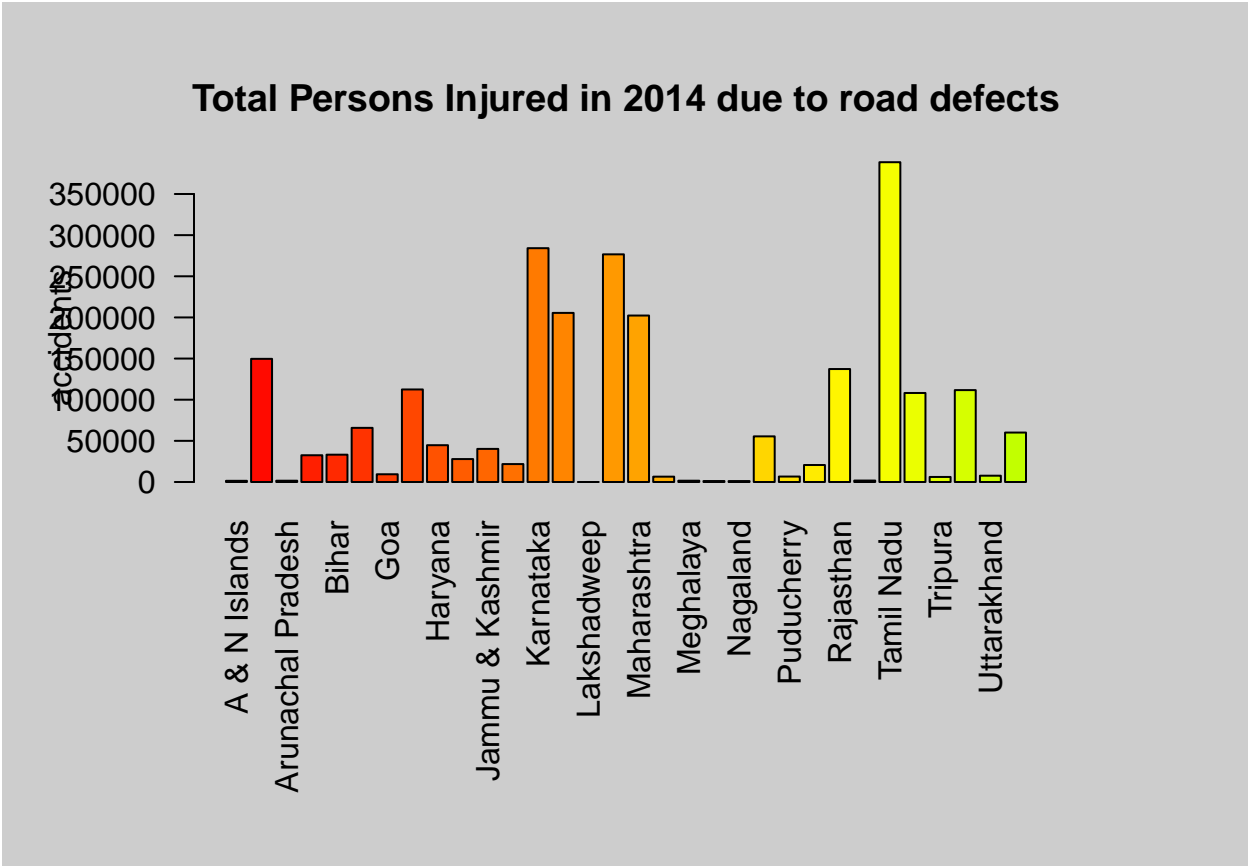
```
barplot(road_c2$Total_2014_Kil, main = "Total Persons Killed in 2014 due to road defects",ylab="accidents")
```



```
barplot(road_c2$Total_2016_Kil, main = "Total Persons Killed in 2016 due to road defects", ylab="accidents")
```



```
barplot(road_c2$Total_2014_Inj, main = "Total Persons Injured in 2014 due to road defects",ylab="accidents")
```



```
barplot(road_c2$Total_2016_Inj, main = "Total Persons Injured in 2016 due to road defects",ylab="accidents")
```

## Total Persons Injured in 2016 due to road defects

