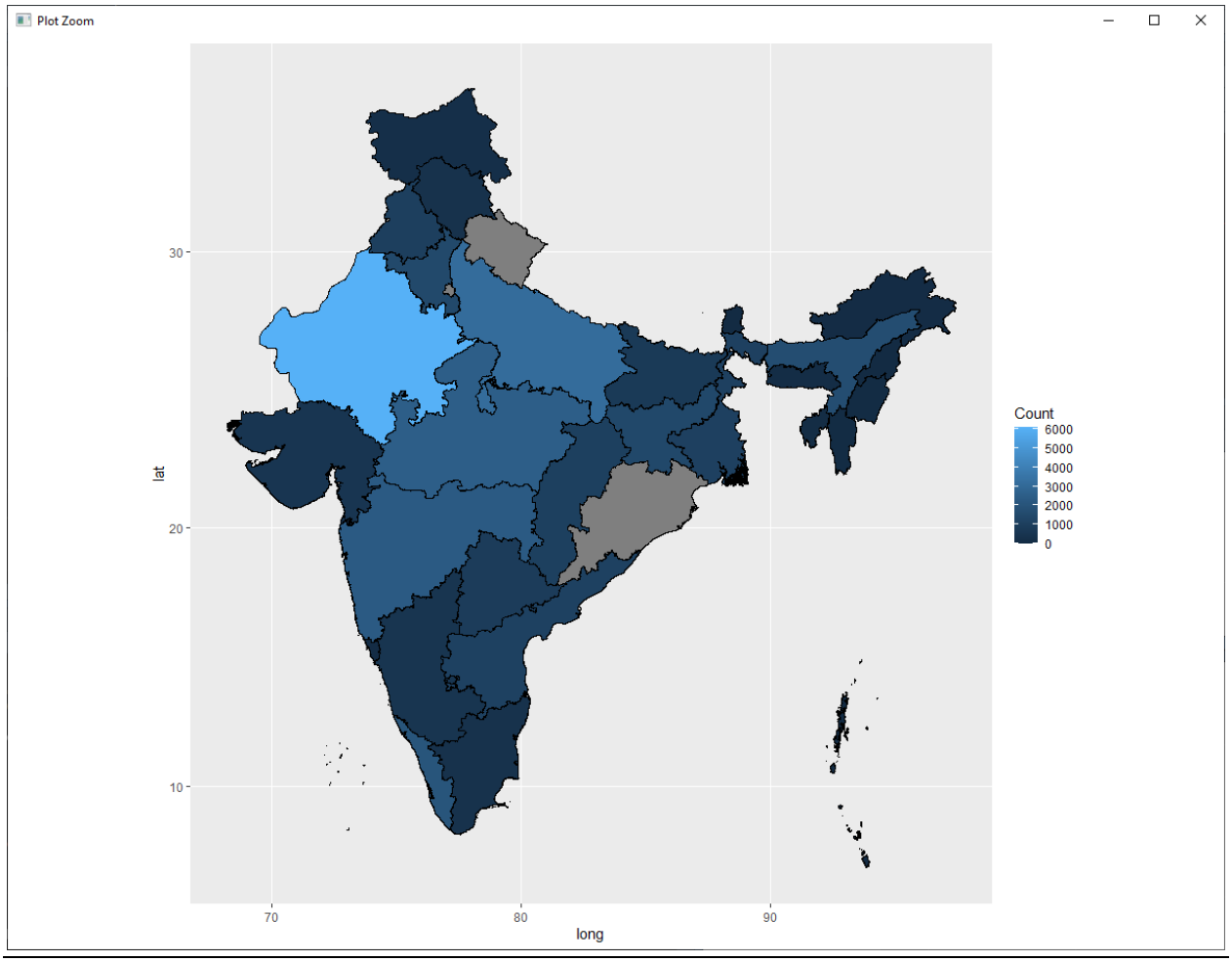
MAP VISUALIZATION

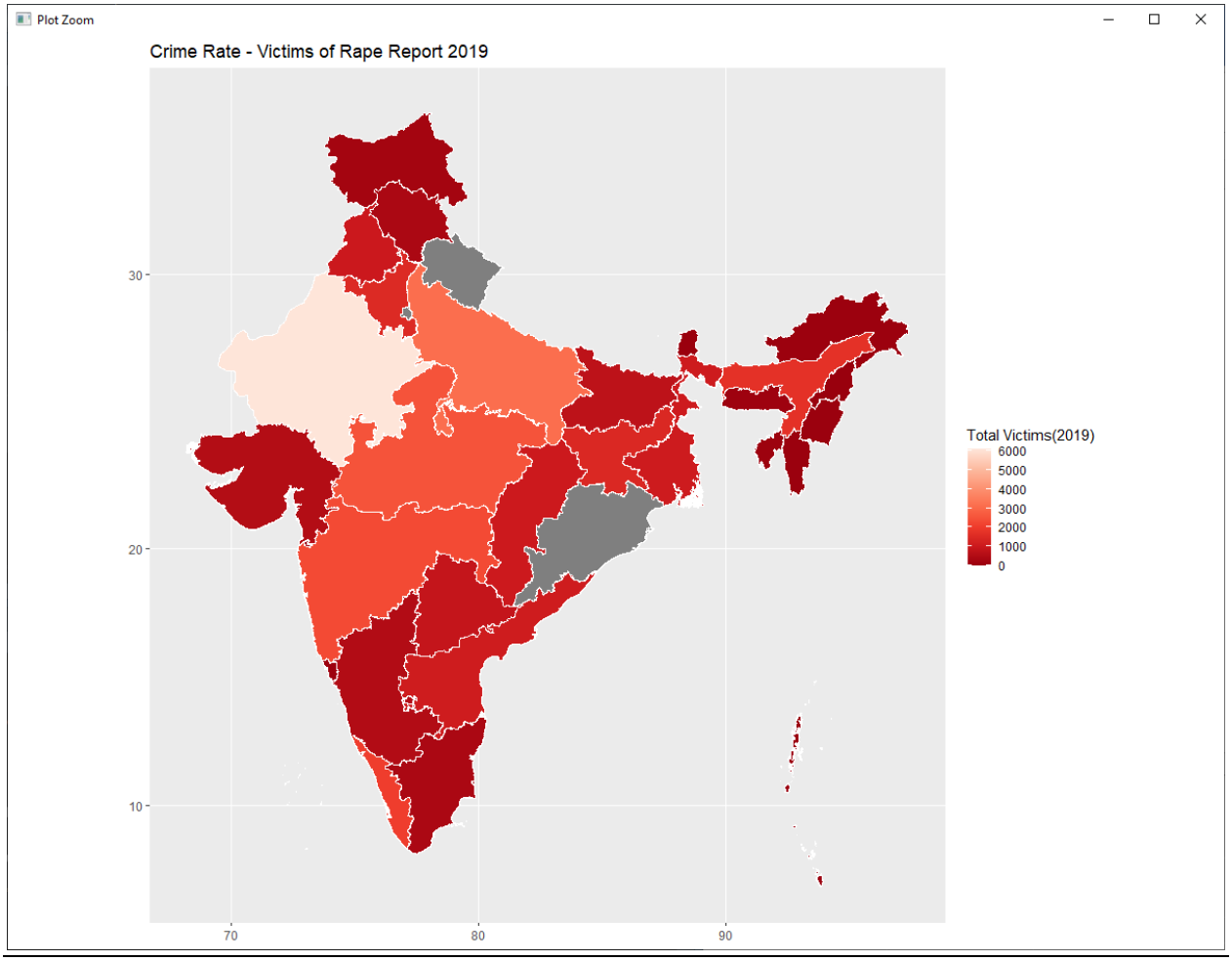
```
plotmap <- ggplot()+
  geom_polygon(data = final.plot,aes(x = long, y = lat, group = group, fill = Count),
               color = "black", size = 0.25) +
 coord_map()

plotmap
```

This will be the map shown after running the above code.

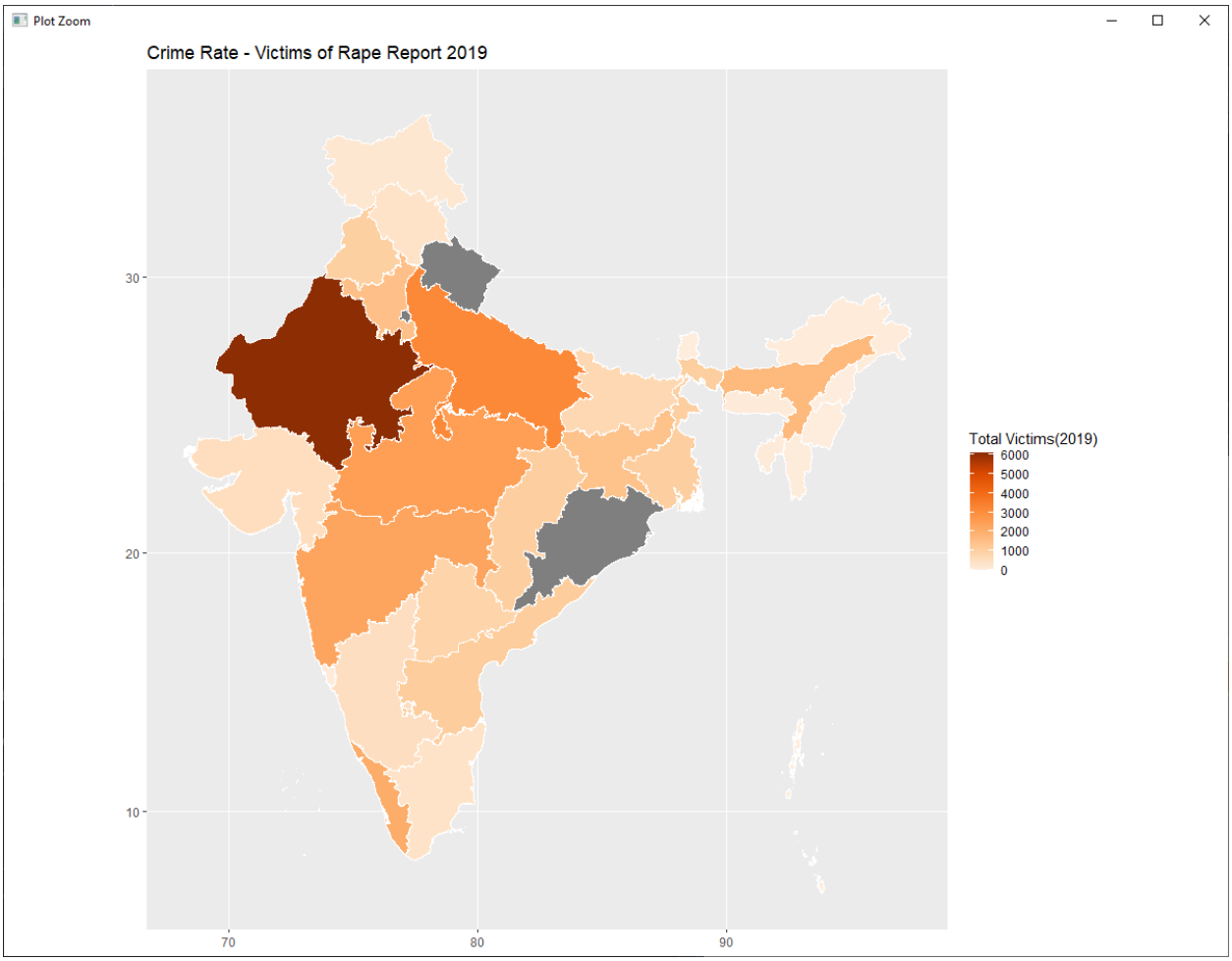


```
#plot with different color
ggplot()+
  geom_polygon(data = final.plot, aes(x = long, y = lat, group = group, fill = Count),
               color = "white", size = 0.25) +
  coord_map()+
  scale_fill_distiller(name = "Total Victims(2019)", palette = "Reds") +
  labs( x = NULL,
        y = NULL,
    title="Crime Rate - Victims of Rape Report 2019")
```



Changed the limit, - see the color palette (dark are most cases of crime reported, less color has less number of crime reported.)

```
ggplot()+
  geom_polygon(data = final.plot, aes(x = long, y = lat, group = group, fill = Count),
               color = "white", size = 0.25) +
  coord_map()+
  scale_fill_distiller(name = "Total Victims(2019)", palette = "Oranges", direction = 1)+
  labs( x = NULL,
        y = NULL,
        title="Crime Rate - Victims of Rape Report 2019")
```



With state names

```
cnames <- aggregate(cbind(long, lat) ~ id, data=final.plot, FUN=function(x) mean(range(x)))   # for aggregating the state names in map

ggplot()+

 geom_polygon(data = final.plot, aes(x = long, y = lat, group = group, fill = Count),

              color = "white", size = 0.25) +

 coord_map()+

 scale_fill_distiller(name = "Total Victims(2019)", palette = "Oranges", direction = 1)+

 labs( x = NULL,

      y = NULL,

      title="Crime Rate - Victims of Rape Report 2019")+

 geom_text(data = cnames, aes(long, lat, label = id), size=2, fontface="bold")+

 theme_dark()
```