```
"'r library(readr) library(dplyr) library(ggplot2)
data <- read_csv("/cloud/project/Suicide_bombing_attacks.csv")
str(data) data <- data %>% mutate(Year = as.numeric(substring(Date, nchar(Date)-3, nchar(Date)))) Plot
the Number of Attacks per Year
ggplot(data, aes(x = Year)) + geom_bar() + labs(title = "Number of Suicide Bombing Attacks Over Time",
x = "Year", y = "Number of Attacks")
```

Number of attacks by city

```
city_attack_count <- data %>% group_by(City) %>% summarise(Count = n())
ggplot(city_attack_count, aes(x = reorder(City, Count), y = Count)) + geom_bar(stat = "identity") +
coord_flip() + labs(title = "Number of Attacks by City", x = "City", y = "Number of Attacks")
```

Number of attacks by province

```
province_attack_count <- data %>% group_by(Province) %>% summarise(Count = n())
ggplot(province_attack_count, aes(x = reorder(Province, Count), y = Count)) + geom_bar(stat = "identity")
+ labs(title = "Number of Attacks by Province", x = "Province", y = "Number of Attacks")
```

Sum the casualties for each year

 $casualty_summary <- \ data \%>\% \ group_by(Year) \%>\% \ summarise(Killed_Max = sum(as.numeric(Killed_Max), na.rm = TRUE), Injured_Max = sum(as.numeric(Injured_Max), na.rm = TRUE))$

Plot the number of casualties

 $ggplot(casualty_summary, aes(x = Year)) + geom_line(aes(y = Killed_Max, color = "Killed Max")) + geom_line(aes(y = Injured_Max, color = "Injured Max")) + labs(title = "Casualties from Suicide Bombing Attacks Over Time", x = "Year", y = "Number of Casualties")$

Number of attacks by day type

```
day_type_count <- data %>% group_by(Blast_Day_Type) %>% summarise(Count = n())
ggplot(day_type_count, aes(x = Blast_Day_Type, y = Count)) + geom_bar(stat = "identity") + labs(title
= "Number of Attacks by Blast Day Type", x = "Day Type", y = "Number of Attacks")
sect_targeting <- data %>% filter(!is.na(Targeted_Sect_if_any)) %>% group_by(Targeted_Sect_if_any)
%>% summarise(Count = n())
ggplot(sect_targeting, aes(x = reorder(Targeted_Sect_if_any, Count), y = Count)) + geom_bar(stat = "identity") + coord_flip() + labs(title = "Number of Attacks Targeting Different Sects", x = "Targeted Sect",
y = "Number of Attacks")
```

Convert temperature columns to numeric

 $\label{eq:continuity} \begin{array}{lll} data & <- \ data & \%>\% & mutate(Temperature_C = as.numeric(Temperature_C), & Temperature_F = as.numeric(Temperature_F)) \end{array}$

Plot temperature distribution

$$\begin{split} & ggplot(data,\,aes(x=Temperature_C)) + geom_histogram(binwidth=1) + labs(title="Temperature Distribution During Attacks (Celsius)", x="Temperature (C)", y="Frequency")" \\ \end{split}$$