Exp 4

```
df <- read.csv("/content/crime data set.csv")
```

```
colnames(df)
```

```
'City' · 'Title' · 'Text' ·
'Murder.Happened.with.reason..1.Property.Land.Disputes..2.Family.Dispute.3.Petty.Quarrels..4.Money.Disputes...5.Personal.Vendetta...6.Love.Affairs...7.Casteism.8..Unkr
'Number.of.child.victims' · 'Number.of.male.victims.adult.' · 'Number.of.female.victims.adult.' · 'Kidnnaping..Number.of.child.victims' · 'Number.of.male.adult.' ·
'Number.of.female.adult.' ·
'Crime.Against.Women...Combined....1..Murder.with.Rape..2..Dowry.Deaths.Sec..3048..3..Suicide.sec.305.306..4..Kidnapping.All..5..Acid.Attack.Sec..326A.IPC..6..Cruelty
'Number.of.adult.victims' · 'Number.of.childs.invoved'
```

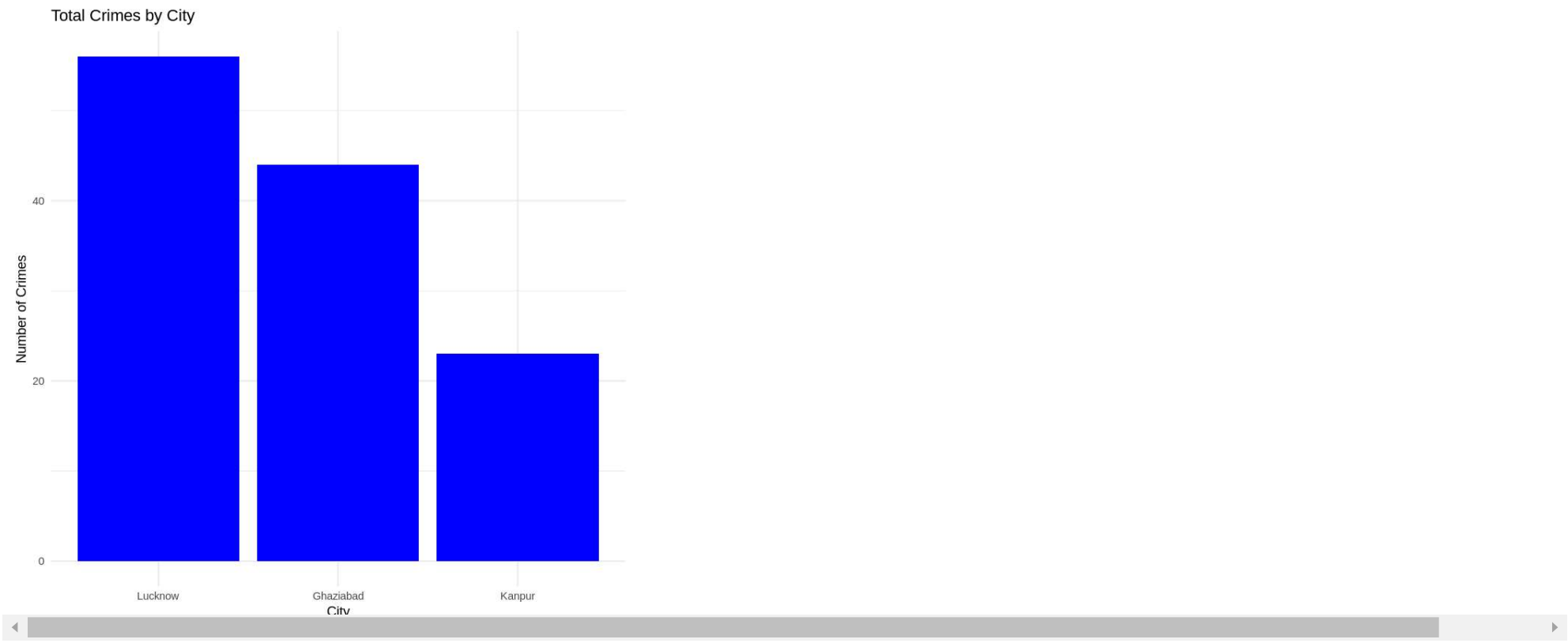
```
library(ggplot2)
library(dplyr)
library(tidyr)
```

```
df$Number.of.child.victims[!is.finite(df$Number.of.child.victims)] <- 0
```

```
df$Number.of.adult.victim[!is.finite(df$Number.of.adult.victim)] <- 0
```

Bar chart

```
df %>%
  group_by(City) %>%
  summarise(Total_Crimes = sum(Number.of.adult.victims, na.rm = TRUE)) %>%
  ggplot(aes(x = reorder(City, -Total_Crimes), y = Total_Crimes)) +
  geom_bar(stat = "identity", fill = "blue") +
  labs(title = "Total Crimes by City", x = "City", y = "Number of Crimes") +
  theme_minimal()
```



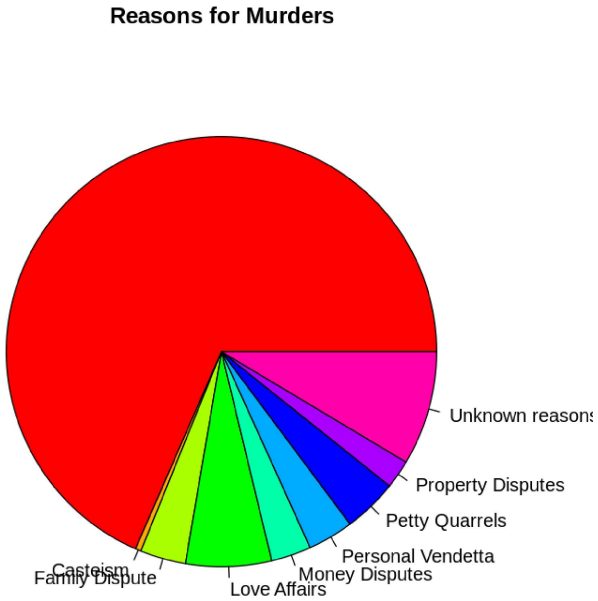
Pie Chart

```
reason_counts
```

A data.frame: 9 × 2

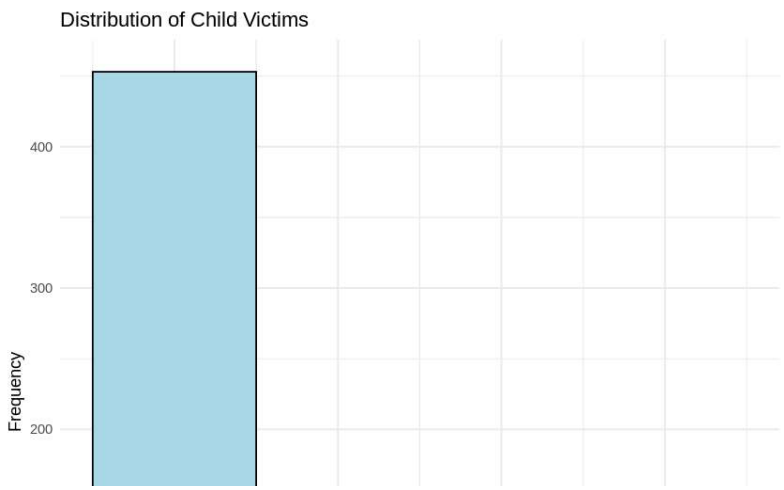
Reason	n
<chr>	<int>
	319
Casteism	2
Family Dispute	16
Love Affairs	30
Money Disputes	14
Personal Vendetta	16
Petty Quarrels	19
Property Disputes	10
Unknown reasons	40

```
reason_counts <- df %>%
  count(`Murder.Happened.with.reason..1.Property.Land.Disputes..2.Family.Dispute.3.Petty.Quarrels..4.Money.Disputes...5.Personal.Vendetta...6
  rename(Reason = `Murder.Happened.with.reason..1.Property.Land.Disputes..2.Family.Dispute.3.Petty.Quarrels..4.Money.Disputes...5.Personal.Ve

reason_counts <- reason_counts %>%
  filter(!is.na(Reason))

pie(reason_counts$n, labels = reason_counts$Reason, main = "Reasons for Murders", col = rainbow(length(reason_counts$n)))
```



Histogram

```
ggplot(df, aes(x = Number.of.child.victims)) +
  geom_histogram(binwidth = 1, fill = "lightblue", color = "black") +
  labs(title = "Distribution of Child Victims", x = "Number of Child Victims", y = "Frequency") +
  theme_minimal()
```


Distribution of Child Victims
Frequency
400
300
200