

```
In [24]: # Read the CSV file with semicolon as the delimiter
data <- read.csv("e-shop clothing 2008.csv", sep = ";", header = TRUE)

head(data)
```

A data.frame: 6 × 14

	year	month	day	order	country	session.ID	page.1..main.category.	page.2..clothing.model.
	<int>	<int>	<int>	<int>	<int>	<int>	<int>	<chr>
1	2008	4	1	1	29	1	1	A13
2	2008	4	1	2	29	1	1	A16
3	2008	4	1	3	29	1	2	B4
4	2008	4	1	4	29	1	2	B17
5	2008	4	1	5	29	1	2	B8
6	2008	4	1	6	29	1	3	C56

```
In [32]: # Load the dplyr package
library(dplyr)

# Create a new DataFrame with relevant columns
csdf <- data %>%
  select(month, day, `page.1..main.category.`, price)

# Rename the columns
csdf <- csdf %>%
  rename(Month = month, Day = day, Type = `page.1..main.category.`, Price = price)

# Replace values in the "Type" column
csdf$Type <- recode(csdf$Type, "1" = "Trousers", "2" = "Skirts", "3" = "Blouses", "4"

# Replace values in the "Month" column
csdf$Month <- recode(csdf$Month, "4" = "April", "5" = "May", "6" = "June", "7" = "July

# Print the first few rows of the new DataFrame
head(csdf)
```

A data.frame: 6 × 4

	Month	Day	Type	Price
	<chr>	<int>	<chr>	<int>
1	April	1	Trousers	28
2	April	1	Trousers	33
3	April	1	Skirts	52
4	April	1	Skirts	38
5	April	1	Skirts	52
6	April	1	Blouses	57

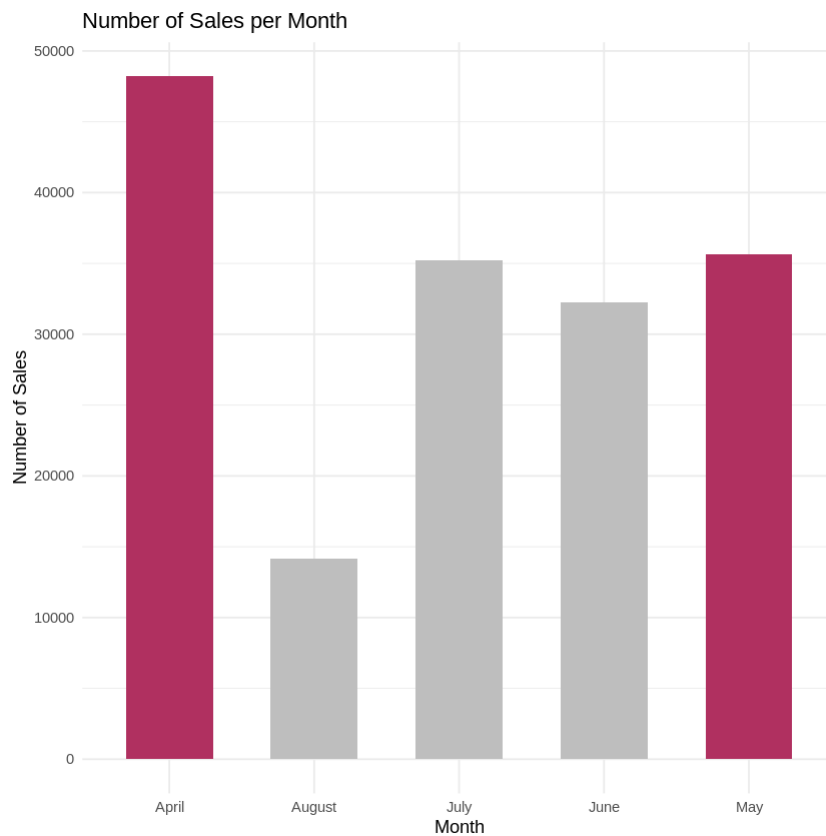
```
In [33]: # Assuming 'csdf' is your data frame
# Load the ggplot2 package
library(ggplot2)

# Count the number of goods sold each month
csmsm <- table(csdf$Month)

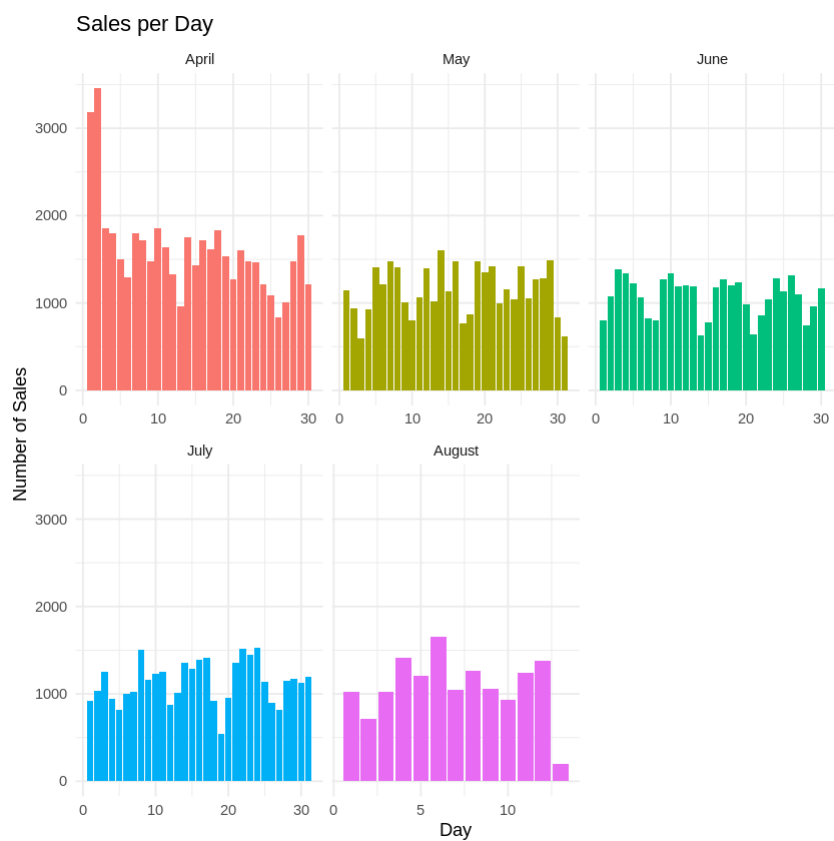
# Create a data frame for plotting
data <- data.frame(Month = names(csmsm), Sales = as.vector(csmsm))

# Create the bar plot
ggplot(data, aes(x = Month, y = Sales, fill = Month)) +
  geom_bar(stat = "identity", width = 0.6) +
  labs(title = "Number of Sales per Month",
        y = "Number of Sales") +
  scale_fill_manual(values = c("maroon", "gray", "gray", "gray", "maroon")) +
```

```
theme_minimal() +  
theme(legend.position = "none")
```



```
In [36]: # Assuming 'csdf' is your data frame  
# Load the ggplot2 package  
library(ggplot2)  
  
# Create data frames for each month  
csap <- subset(csdf, Month == "April")  
csmy <- subset(csdf, Month == "May")  
csjn <- subset(csdf, Month == "June")  
csjl <- subset(csdf, Month == "July")  
csau <- subset(csdf, Month == "August")  
  
# Combine all data frames into one  
combined_df <- rbind(csap, csmy, csjn, csjl, csau)  
combined_df$Month <- factor(combined_df$Month, levels = c("April", "May", "June", "Jul  
  
# Create subplots with facets  
p <- ggplot(combined_df, aes(x = Day)) +  
  geom_bar(aes(fill = Month), position = "dodge") +  
  labs(title = "Sales per Day", y = "Number of Sales") +  
  theme_minimal() +  
  theme(legend.position = "none") +  
  facet_wrap(~Month, scales = "free_x")  
  
print(p)
```

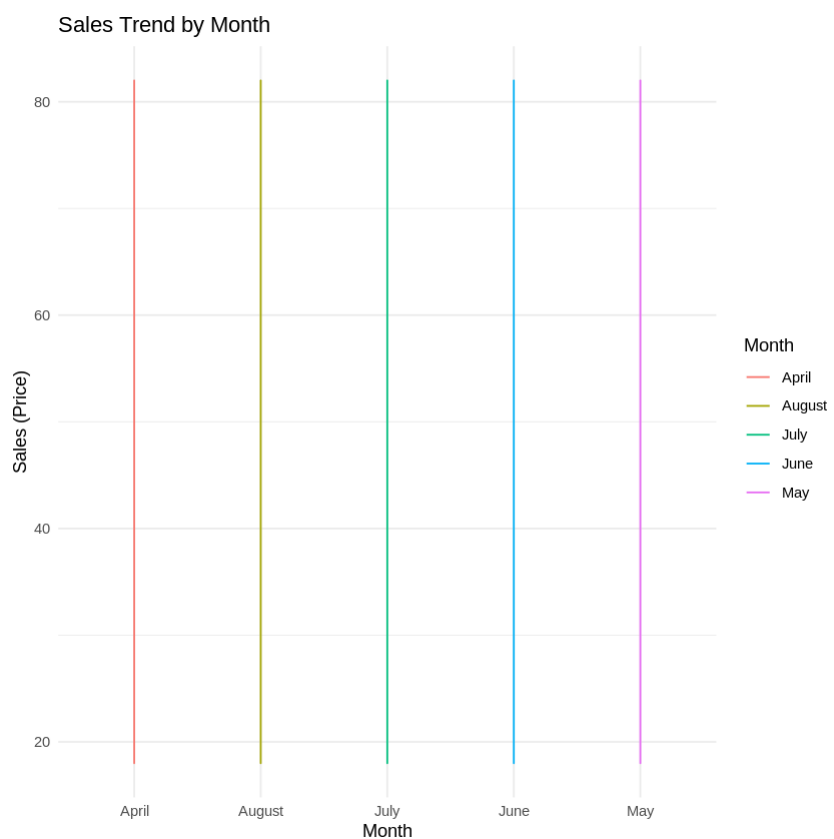


```
In [72]: # Load the ggplot2 package
library(ggplot2)

# Assuming you have a data frame named "csdf" with columns "Month" and "Price"

# Create a Line plot
line_plot <- ggplot(csdf, aes(x = Month, y = Price, color = Month, group = Month)) +
  geom_line() +
  labs(title = "Sales Trend by Month", x = "Month", y = "Sales (Price)") +
  theme_minimal()

# Display the Line plot
print(line_plot)
```



```
In [67]: # Load the ggplot2 package
library(ggplot2)

# Assuming you have a data frame named "csdf" with columns "Type" and "Price"

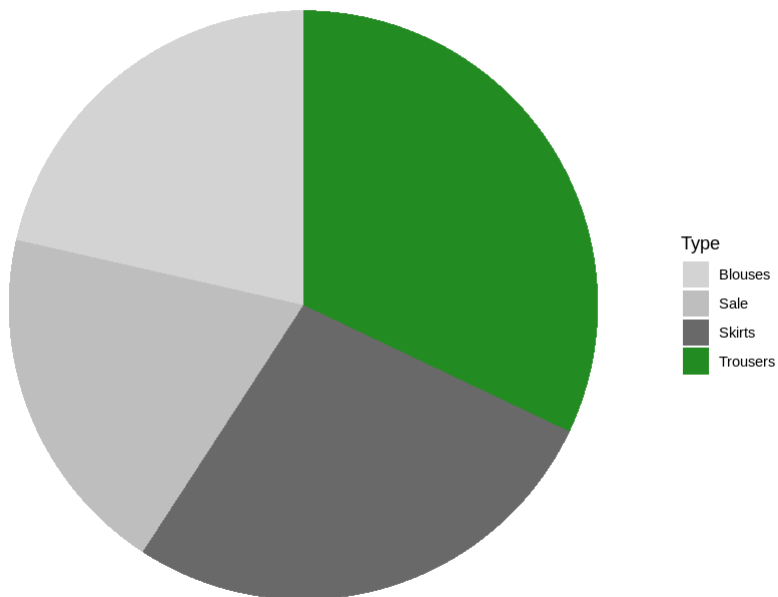
# Aggregate total sales for each clothing type
total_sales <- aggregate(Price ~ Type, data = csdf, FUN = sum)

# Create a pie chart
pie_chart <- ggplot(total_sales, aes(x = "", y = Price, fill = Type)) +
```

```
geom_bar(stat = "identity", width = 1) +
coord_polar(theta = "y") +
labs(title = "Share of Total Sales in Dollars per Type") +
scale_fill_manual(values = c('lightgray', 'gray', 'dimgray', 'forestgreen')) +
theme_void()

# Display the pie chart
print(pie_chart)
```

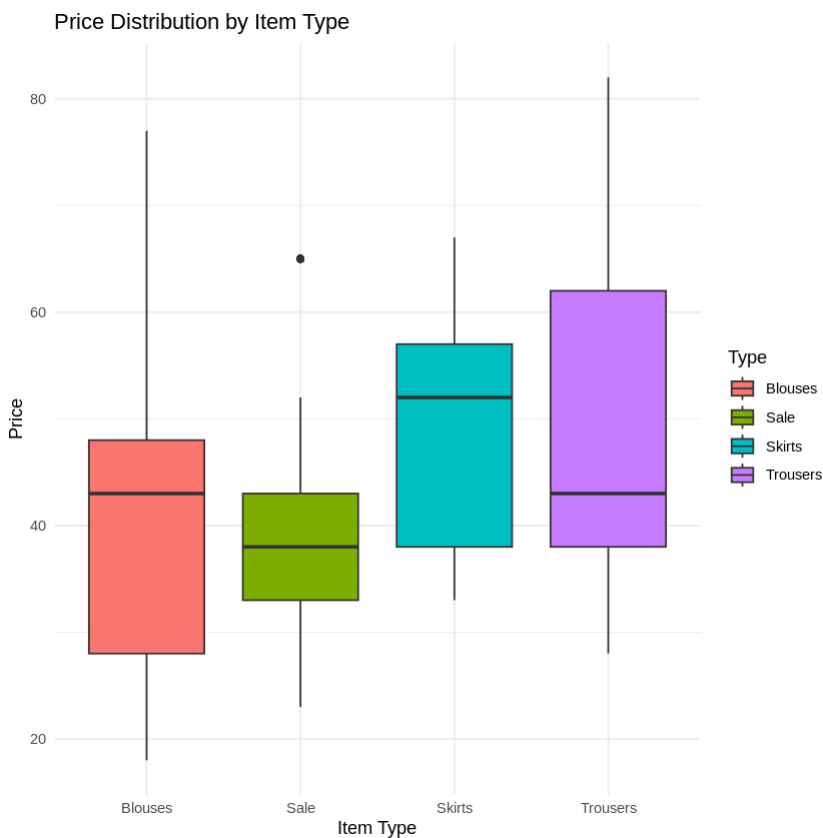
Share of Total Sales in Dollars per Type



```
In [73]: # Load the ggplot2 package
library(ggplot2)

# Create a box plot
box_plot <- ggplot(csd, aes(x = Type, y = Price, fill = Type)) +
  geom_boxplot() +
  labs(title = "Price Distribution by Item Type", x = "Item Type", y = "Price") +
  theme_minimal()

# Display the box plot
print(box_plot)
```



```
In [80]: # Load the ggplot2 package
library(ggplot2)
```

```
# Assuming you have a data frame named "csdf" with columns "Month" and "Day"

# Define colors for each month
month_colors <- c("April" = "red", "May" = "blue", "June" = "green", "July" = "purple"

# Create separate histograms for each month
day_histogram <- ggplot(csdf, aes(x = Day, fill = Month)) +
  geom_histogram(binwidth = 1, color = "black") +
  labs(title = "Distribution of Days", x = "Day", y = "Frequency of customers") +
  theme_minimal() +
  scale_fill_manual(values = month_colors) +
  facet_wrap(~Month, nrow = 2)

# Display the histograms
print(day_histogram)
```

