

Scatter Plot.R

```
1 library(ggplot2)
2
3 # Create a data frame
4 age_salary_data <- data.frame(
5   Age = c(22, 25, 28, 32, 35, 40, 45),
6   Salary = c(28000, 32000, 40000, 50000, 55000, 60000, 65000)
7 )
8
9 # Scatter plot
10 ggplot(age_salary_data, aes(x = Age, y = Salary)) +
11   geom_point(color = "darkorange", size = 3) +
12   labs(title = "Age vs. Salary",
13       x = "Age (years)",
14       y = "Salary ($)") +
15   theme_minimal()
16
```

R 4.4.2 · ~/

```
> library(ggplot2)
>
> # Create a data frame
> age_salary_data <- data.frame(
+   Age = c(22, 25, 28, 32, 35, 40, 45),
+   Salary = c(28000, 32000, 40000, 50000, 55000, 60000, 65000)
+ )
>
> # Scatter plot
> ggplot(age_salary_data, aes(x = Age, y = Salary)) +
+   geom_point(color = "darkorange", size = 3) +
+   labs(title = "Age vs. Salary",
+       x = "Age (years)",
+       y = "Salary ($)") +
+   theme_minimal()
>
```



Scatter Plot.R X lineplot.R X

Source on Save Run Source

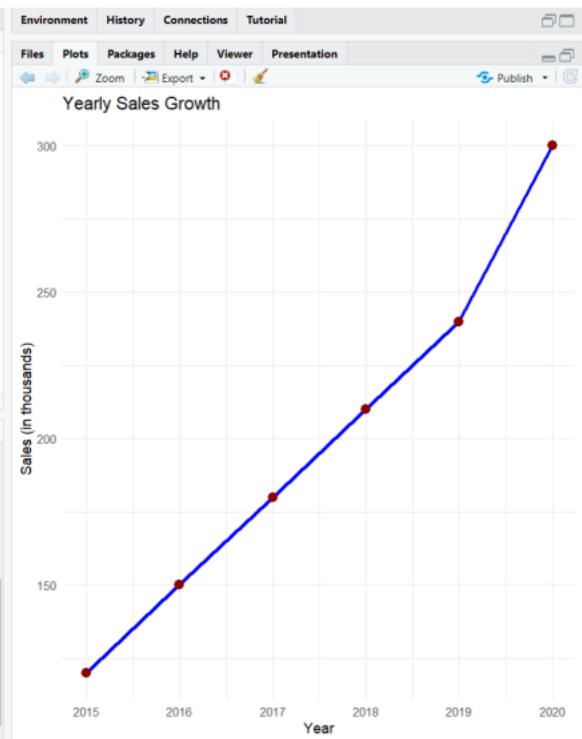
```
1 year_sales_data <- data.frame(
2   Year = 2015:2020,
3   Sales = c(120, 150, 180, 210, 240, 300)
4 )
5
6 ggplot(year_sales_data, aes(x = Year, y = Sales)) +
7   geom_line(color = "blue", size = 1.2) +
8   geom_point(color = "darkred", size = 3) +
9   labs(title = "Yearly Sales Growth",
10      x = "Year",
11      y = "Sales (in thousands)") +
12   theme_minimal()
```

13:1 (Top Level) R Script

R - R 4.4.2 - ~/

```
> year_sales_data <- data.frame(
+   Year = 2015:2020,
+   Sales = c(120, 150, 180, 210, 240, 300)
+ )
>
> ggplot(year_sales_data, aes(x = Year, y = Sales)) +
+   geom_line(color = "blue", size = 1.2) +
+   geom_point(color = "darkred", size = 3) +
+   labs(title = "Yearly Sales Growth",
+      x = "Year",
+      y = "Sales (in thousands)") +
+   theme_minimal()
```

Warning message:  
Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.  
Please use `linewidth` instead.  
This warning is displayed once every 8 hours.  
Call `lifecycle::last\_lifecycle\_warnings()` to see where this warning was generated.

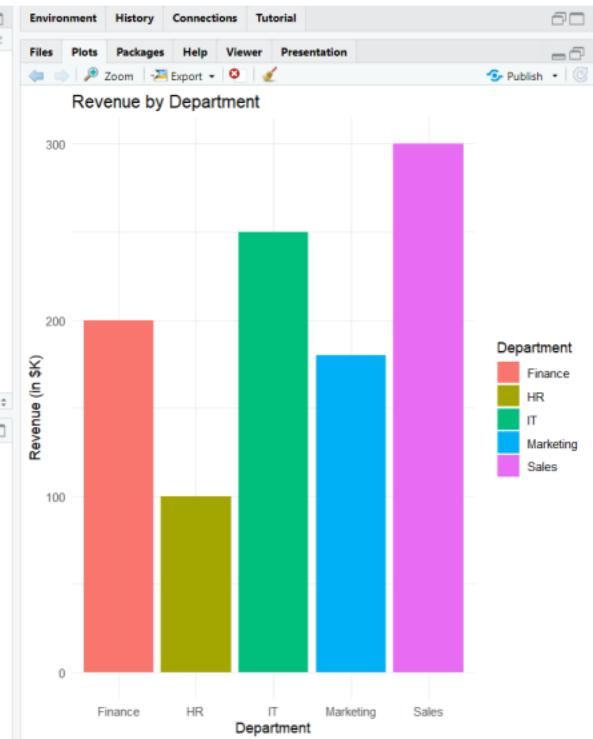


Scatter Plot.R lineplot.R Bar Plot.R

```
1 department_data <- data.frame(
2   Department = c("HR", "Finance", "IT", "Marketing", "Sales"),
3   Revenue = c(100, 200, 250, 180, 300)
4 )
5
6 ggplot(department_data, aes(x = Department, y = Revenue, fill = Department)) +
7   geom_bar(stat = "identity") +
8   labs(title = "Revenue by Department",
9        x = "Department",
10       y = "Revenue (in $K)") +
11   theme_minimal()
12
```

12:1 (Top Level) :

```
R 4.4.2 · ~/r
> department_data <- data.frame(
+   Department = c("HR", "Finance", "IT", "Marketing", "Sales"),
+   Revenue = c(100, 200, 250, 180, 300)
+ )
>
> ggplot(department_data, aes(x = Department, y = Revenue, fill = Department)) +
+   geom_bar(stat = "identity") +
+   labs(title = "Revenue by Department",
+        x = "Department",
+        y = "Revenue (in $K)") +
+   theme_minimal()
> |
```



Scatter Plot.R X lineplot.R X Bar Plot.R X Histogram.R X

Source on Save Run Source

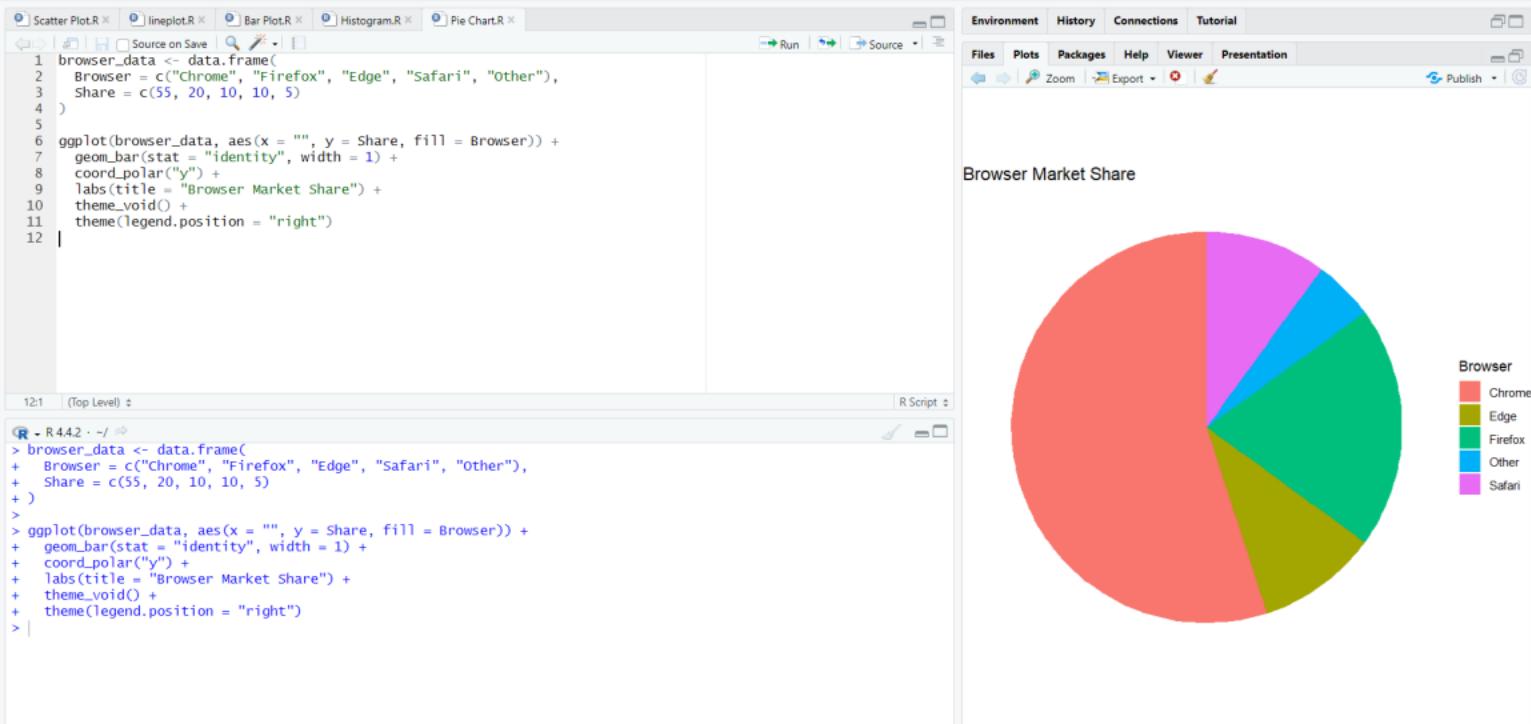
```
1 customer_ages <- data.frame(  
2   Age = c(21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43)  
3 )  
4  
5 ggplot(customer_ages, aes(x = Age)) +  
6   geom_histogram(binwidth = 4, fill = "darkgreen", color = "black", alpha = 0.6) +  
7   labs(title = "Customer Age Distribution",  
8       x = "Age",  
9       y = "Count") +  
10  theme_minimal()  
11
```

11:1 (Top Level) R Script

R - R 4.4.2 · ~/

```
> customer_ages <- data.frame(  
+   Age = c(21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43)  
+ )  
>  
> ggplot(customer_ages, aes(x = Age)) +  
+   geom_histogram(binwidth = 4, fill = "darkgreen", color = "black", alpha = 0.6) +  
+   labs(title = "Customer Age Distribution",  
+       x = "Age",  
+       y = "Count") +  
+   theme_minimal()  
>
```





```
Scatter Plot.R lineplot.R Bar Plot.R Histogram.R Pie Chart.R Box Plot.R
Source on Save Run Source
1 scores_section_data <- data.frame(
2   Section = c("A", "A", "A", "B", "B", "B", "C", "C", "C"),
3   Score = c(75, 80, 85, 70, 72, 78, 88, 85, 90)
4 )
5
6 ggplot(scores_section_data, aes(x = Section, y = Score, fill = Section)) +
7   geom_boxplot() +
8   labs(title = "Test Scores by Section",
9        x = "Section",
10       y = "Score") +
11   theme_minimal()
12 |
```

```
12:1 (Top Level) R Script
R - R 4.4.2 - /-
> scores_section_data <- data.frame(
+   Section = c("A", "A", "A", "B", "B", "B", "C", "C", "C"),
+   Score = c(75, 80, 85, 70, 72, 78, 88, 85, 90)
+ )
>
> ggplot(scores_section_data, aes(x = Section, y = Score, fill = Section)) +
+   geom_boxplot() +
+   labs(title = "Test Scores by Section",
+        x = "Section",
+        y = "Score") +
+   theme_minimal()
> |
```



```
Scatter Plot.R X lineplot.R X Bar Plot.R X Histogram.R X Pie Chart.R X Density Plot.R X
Source on Save Run Source
1 height_data <- data.frame(
2   Height = c(150, 155, 160, 162, 165, 168, 170, 175, 178, 180, 182)
3 )
4
5 ggplot(height_data, aes(x = Height)) +
6   geom_density(fill = "skyblue", alpha = 0.5) +
7   labs(title = "Density Plot of Student Heights",
8       x = "Height (cm)",
9       y = "Density") +
10  theme_minimal()
11
```

```
11:1 (Top Level) R Script
R 4.4.2 · ~/ ...
> height_data <- data.frame(
+   Height = c(150, 155, 160, 162, 165, 168, 170, 175, 178, 180, 182)
+ )
>
> ggplot(height_data, aes(x = Height)) +
+   geom_density(fill = "skyblue", alpha = 0.5) +
+   labs(title = "Density Plot of Student Heights",
+       x = "Height (cm)",
+       y = "Density") +
+   theme_minimal()
> |
```



```

1 bp_data <- data.frame(
2   Gender = c(rep("Male", 6), rep("Female", 6)),
3   BP = c(120, 125, 130, 135, 140, 145, 110, 115, 120, 125, 130, 135)
4 )
5
6 ggplot(bp_data, aes(x = Gender, y = BP, fill = Gender)) +
7   geom_violin() +
8   labs(title = "Blood Pressure by Gender",
9        x = "Gender",
10       y = "Blood Pressure (mmHg)") +
11   theme_minimal()
12

```

```

12:1 (Top Level) ±
R - R44.2 - ~/ ...
+ geom_bar(stat = "identity", position = "dodge") +
+ facet_wrap(~ Branch) +
+ labs(title = "Monthly Profit by Branch",
+       x = "Month",
+       y = "Profit ($K)") +
+ theme_minimal()
+ bp_data <- data.frame(
+   Gender = c(rep("Male", 6), rep("Female", 6)),
+   BP = c(120, 125, 130, 135, 140, 145, 110, 115, 120, 125, 130, 135)
+ )
>
> ggplot(bp_data, aes(x = Gender, y = BP, fill = Gender)) +
+   geom_violin() +
+   labs(title = "Blood Pressure by Gender",
+        x = "Gender",
+        y = "Blood Pressure (mmHg)") +
+   theme_minimal()
>

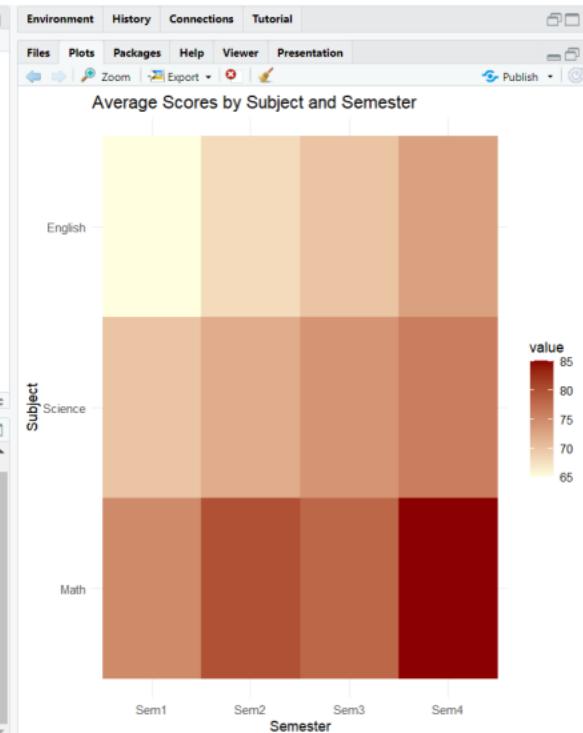
```



```
1 library(reshape2)
2
3 scores_matrix <- data.frame(
4   Semester = c("Sem1", "Sem2", "Sem3", "Sem4"),
5   Math = c(75, 80, 78, 85),
6   Science = c(70, 72, 74, 76),
7   English = c(65, 68, 70, 73)
8 )
9
10 melted_scores <- melt(scores_matrix, id.vars = "Semester")
11
12 ggplot(melted_scores, aes(x = Semester, y = variable, fill = value)) +
13   geom_tile() +
14   scale_fill_gradient(low = 'lightyellow', high = 'darkred') +
15   labs(title = "Average Scores by Subject and Semester",
16       x = "Semester",
17       y = "Subject") +
18   theme_minimal()
```

20:1 (Top Level) :

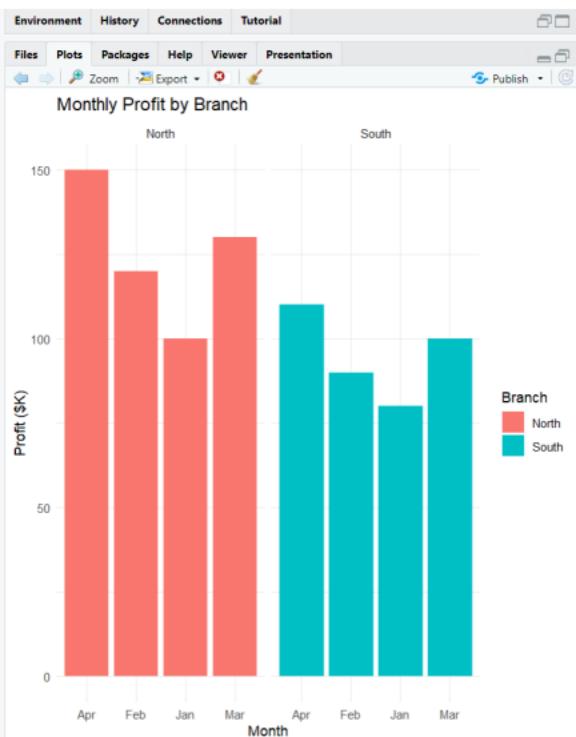
```
R > R 4.4.2 - ~/r
> > scores_matrix
+ Semester = c("Fall", "Spring", "Summer")
+ Math = c(75, 82, 88)
+ Science = c(80, 85, 90)
+ English = c(78, 83, 85)
+ )
> >
> melted_scores
> >
> ggplot(melted_scores, aes(x = Semester, y = score))
+ geom_line()
+ scale_fill_discrete()
+ labs(title = "Student Scores by Semester and Subject",
+ x = "Semester",
+ y = "Score",
+ theme_minimal()
```



```

1 branch_profit <- data.frame(
2   Month = c("Jan", "Jan", "Feb", "Feb", "Mar", "Mar", "Apr", "Apr"),
3   Branch = c("North", "South", "North", "South", "North", "South", "North", "South"),
4   Profit = c(100, 80, 120, 90, 130, 100, 150, 110)
5 )
6
7 ggplot(branch_profit, aes(x = Month, y = Profit, fill = Branch)) +
8   geom_bar(stat = "identity", position = "dodge") +
9   facet_wrap(~ Branch) +
10  labs(title = "Monthly Profit by Branch",
11    x = "Month",
12    y = "Profit ($K)") +
13  theme_minimal()
14

```



```

14:1 (Top Level) <-- R4.4.2 · ~/r
+   labs(title = "Average Scores by Subject and Semester",
+     x = "Semester",
+     y = "Subject") +
+   theme_minimal()
> branch_profit <- data.frame(
+   Month = c("Jan", "Jan", "Feb", "Feb", "Mar", "Mar", "Apr", "Apr"),
+   Branch = c("North", "South", "North", "South", "North", "South", "North", "South"),
+   Profit = c(100, 80, 120, 90, 130, 100, 150, 110)
+ )
>
> ggplot(branch_profit, aes(x = Month, y = Profit, fill = Branch)) +
+   geom_bar(stat = "identity", position = "dodge") +
+   facet_wrap(~ Branch) +
+   labs(title = "Monthly Profit by Branch",
+     x = "Month",
+     y = "Profit ($K)") +
+   theme_minimal()
> |
```