Boletins Escolares - Turma A

```
library(ggplot2)
library(knitr)

# Carregar dados
notas <- read.csv("https://raw.githubusercontent.com/dayanebravo/LPA_R/refs/heads/main/aula_05/Aulas_Pra
#notas <- read.csv("notas.csv")
```

```
# Calcular média e status
notas$media <- round(rowMeans(notas[, 2:5]), 2)
notas$status <- ifelse(notas$media >= 7, "Aprovado", "Reprovado")

# Calcular estatísticas da turma
total_alunos <- nrow(notas)
media_turma <- round(mean(notas$media), 2)
aprovados <- sum(notas$status == "Aprovado")
reprovados <- sum(notas$status == "Reprovado")
```

Resumo da Turma

Total de alunos: 5
Média da turma: 7.52
Aprovados: 3 alunos
Reprovados: 2 alunos

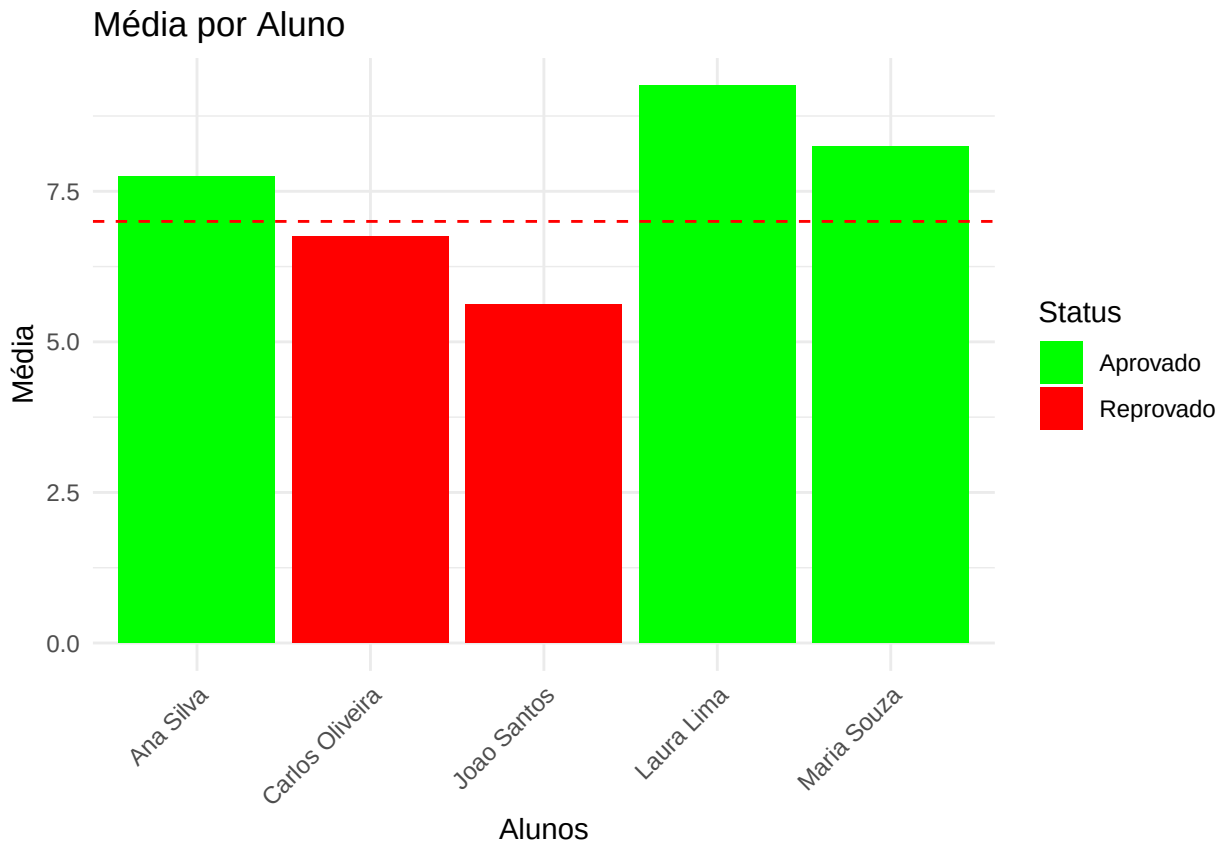
Tabela de Notas

```
kable(notas,
      col.names = c("Aluno", "Bimestre 1", "Bimestre 2", "Bimestre 3", "Bimestre 4", "Média", "Status")
      align = 'c')
```

Aluno	Bimestre 1	Bimestre 2	Bimestre 3	Bimestre 4	Média	Status
Ana Silva	7.5	8.0	6.5	9.0	7.75	Aprovado
Carlos Oliveira	5.0	6.5	7.0	8.5	6.75	Reprovado
Maria Souza	8.0	7.5	9.0	8.5	8.25	Aprovado
Joao Santos	4.5	5.0	6.0	7.0	5.62	Reprovado
Laura Lima	9.0	8.5	9.5	10.0	9.25	Aprovado

Gráfico da Turma

```r
# Gráfico de barras das médias
ggplot(notas, aes(x = aluno, y = media, fill = status)) +
  geom_bar(stat = "identity") +
  geom_hline(yintercept = 7, linetype = "dashed", color = "red") +
  scale_fill_manual(values = c("Aprovado" = "green", "Reprovado" = "red")) +
  labs(title = "Média por Aluno",
       x = "Alunos",
       y = "Média",
       fill = "Status") +
  theme_minimal() +
  theme(axis.text.x = element_text(angle = 45, hjust = 1))
```



Desempenho Individual

```r
# Gráfico para cada aluno
for (i in 1:nrow(notas)) {
  cat("\n### ", notas$aluno[i], "\n")
  cat("**Média:** ", notas$media[i], " | **Status:** ", notas$status[i], "\n\n")

  # Dados do aluno
  aluno_notas <- data.frame(
    Bimestre = c("B1", "B2", "B3", "B4"),
    Nota = as.numeric(notas[i, 2:5])
```

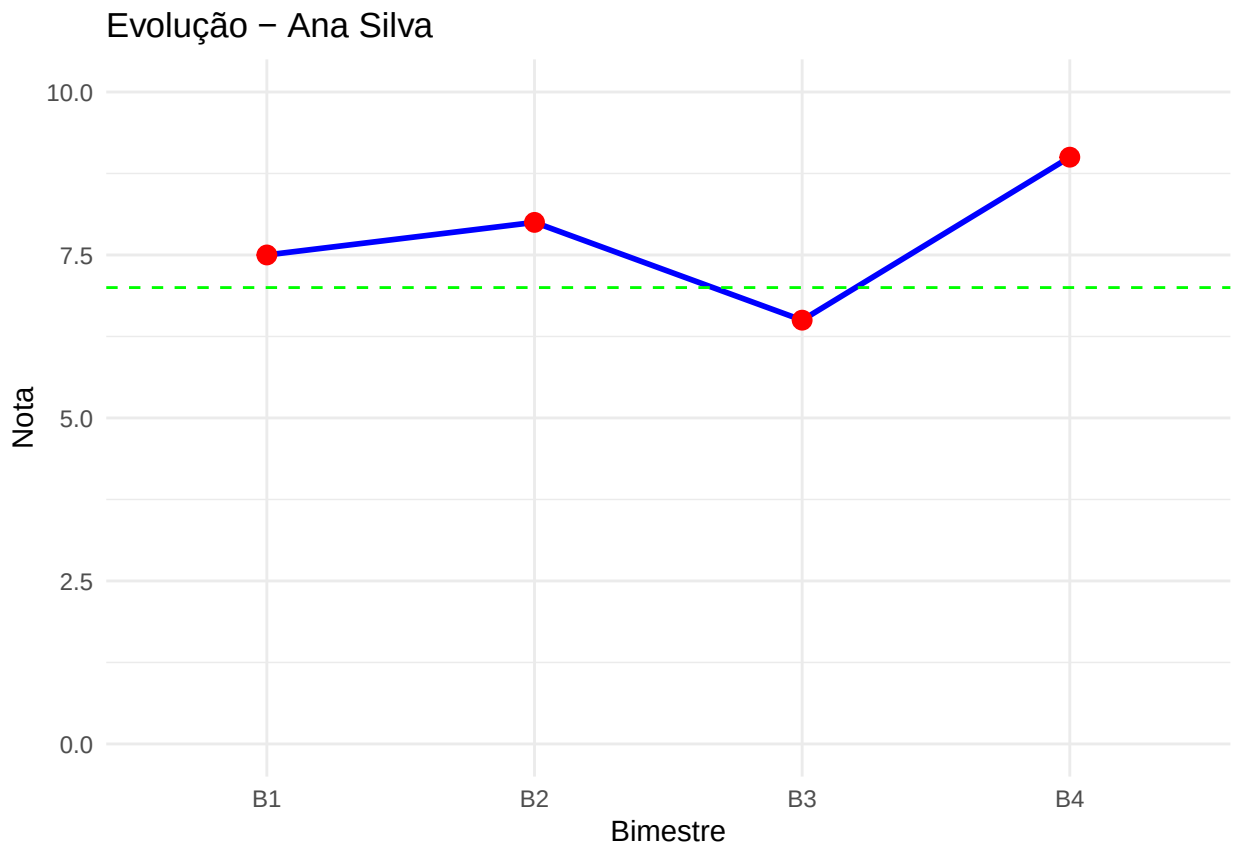
```
  )

  # Gráfico
  grafico <- ggplot(aluno_notas, aes(x = Bimestre, y = Nota, group = 1)) +
    geom_line(color = "blue", size = 1) +
    geom_point(color = "red", size = 3) +
    geom_hline(yintercept = 7, linetype = "dashed", color = "green") +
    ylim(0, 10) +
    labs(title = paste("Evolução -", notas$aluno[i]),
         x = "Bimestre",
         y = "Nota") +
    theme_minimal()

  print(grafico)
  cat("\n\n")
}
```

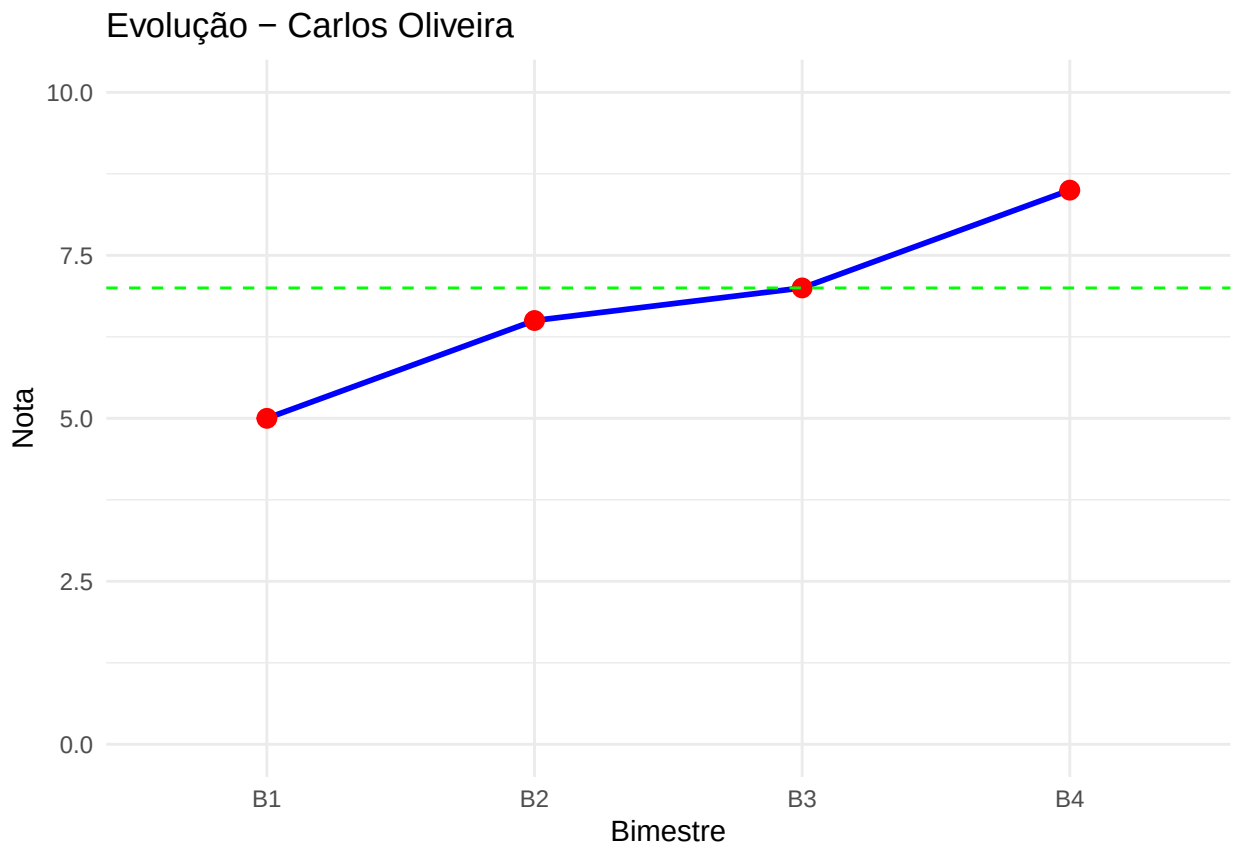
Ana Silva

Média: 7.75 | **Status:** Aprovado



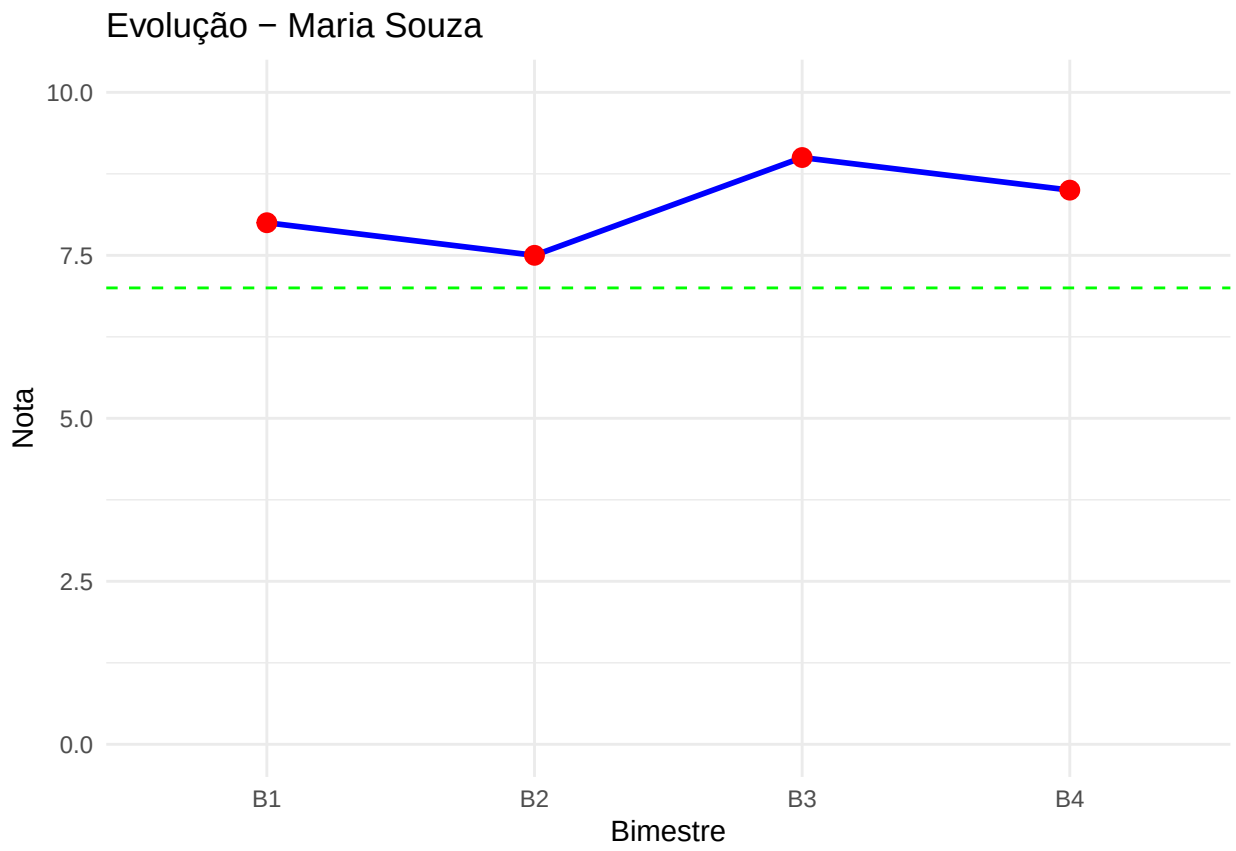
Carlos Oliveira

Média: 6.75 | **Status:** Reprovado



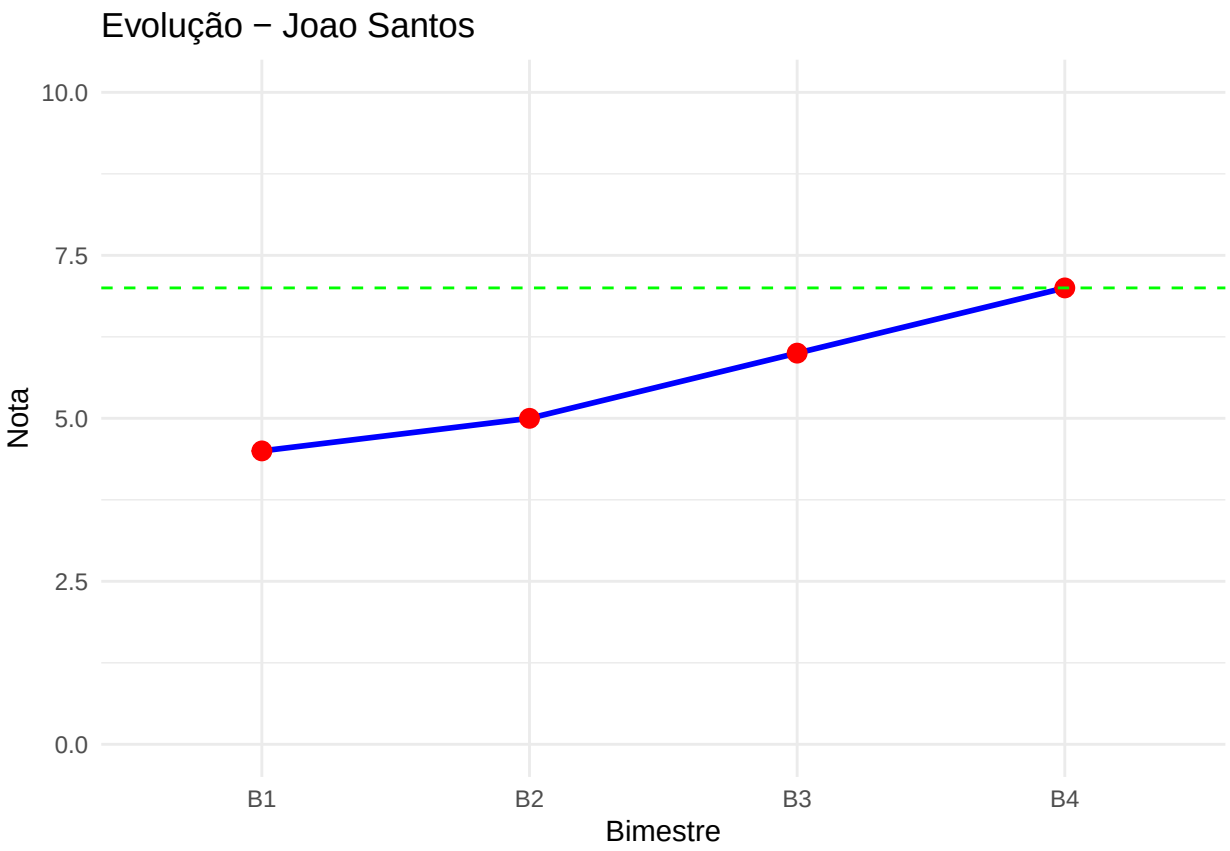
Maria Souza

Média: 8.25 | **Status:** Aprovado



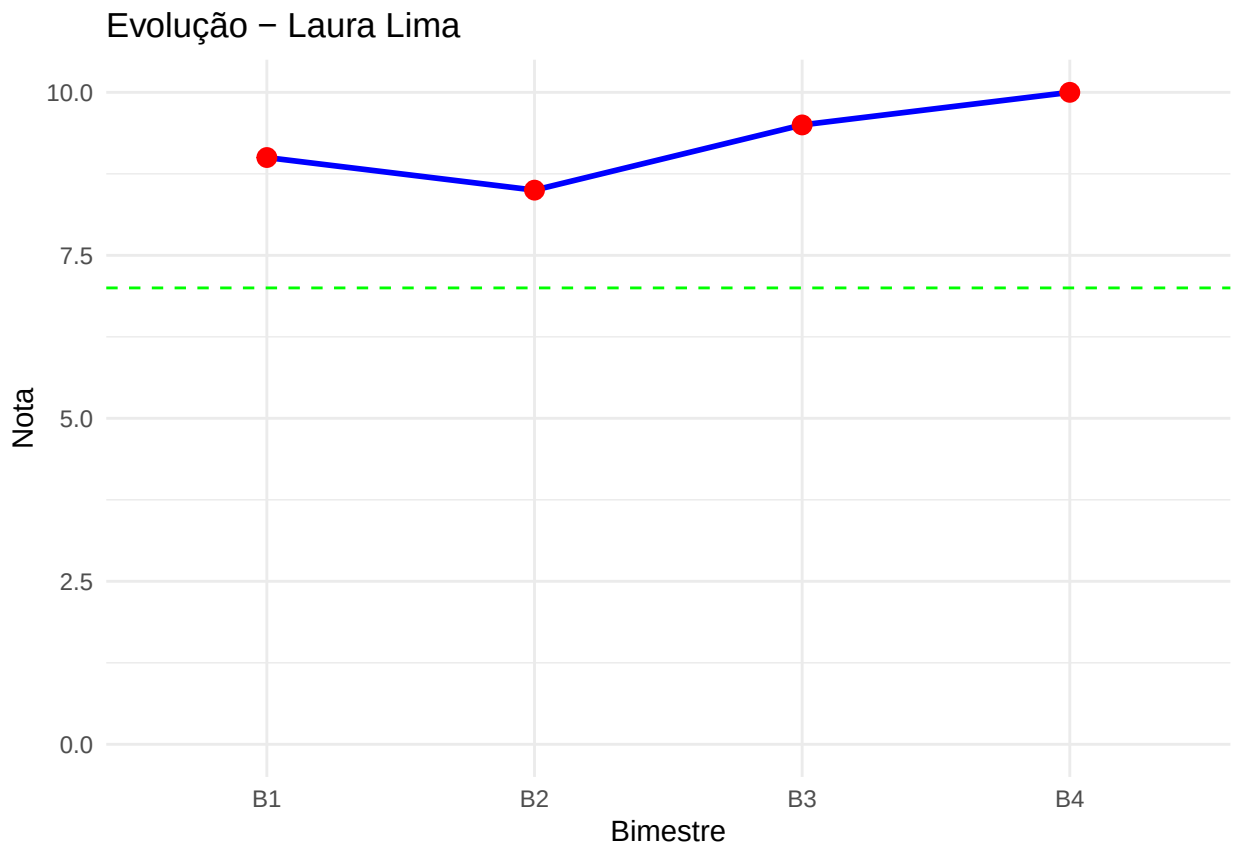
Joao Santos

Média: 5.62 | **Status:** Reprovado



Laura Lima

Média: 9.25 | **Status:** Aprovado



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