myCompiler

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Program input

Output

```
1  # Load necessary libraries
2  library(ggplot2)
3
4  # Step 1: Create mock data directly in R
5  year <- 2000:2025
6  crude_oil_price <- c(22, 24, 25, 28, 32, 40, 50, 60, 70,
7                       110, 105, 96, 60, 45, 50, 65, 70, 75
8  inflation <- c(3.2, 3.5, 3.8, 4.1, 4.3, 5.2, 6.5, 6.8, 7.
9                 10.1, 9.8, 8.5, 5.0, 4.0, 4.5, 5.0, 5.2, 5
10
11 # Combine into a data frame
12 df <- data.frame(year, crude_oil_price, inflation)
13
14 # Step 2: Line Plot for Trends
15 ggplot(df, aes(x = year)) +
16   geom_line(aes(y = crude_oil_price, color = "Crude Oil P
17   geom_line(aes(y = inflation * 10, color = "Inflation Ra
18   scale_y_continuous(
19     name = "Crude Oil Price",
20     sec.axis = sec_axis(~./10, name = "Inflation Rate (%)
21   ) +
22   labs(title = "Crude Oil Prices vs Inflation (2000-2025)
23   scale_color_manual(values = c("Crude Oil Price ($/bbl)"
24   theme_minimal()
25
26 # Step 3: Linear Regression Model
27 model <- lm(inflation ~ crude_oil_price, data = df)
28 summary(model)
29
30 # Step 4: Regression Plot
31 ggplot(df, aes(x = crude_oil_price, y = inflation)) +
32   geom_point(color = "darkgreen", size = 3) +
33   geom_smooth(method = "lm", se = TRUE, color = "black")
34   labs(title = "Linear Regression: Crude Oil Price vs Inf
35        x = "Crude Oil Price ($/bbl)", y = "Inflation Rate
36   theme_minimal()
37
```

```
Call:
lm(formula = inflation ~

Residuals:
    Min       1Q   Median
-1.6329 -0.9875 -0.0021

Coefficients:
                  Estimate
(Intercept)      2.268683
crude_oil_price  0.056466
---
Signif. codes:  0 '***' 0

Residual standard error:
Multiple R-squared:  0.70
F-statistic: 58.03 on 1 a

`geom_smooth()` using for

[Execution complete with
```
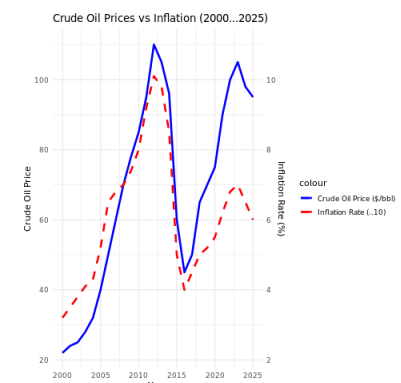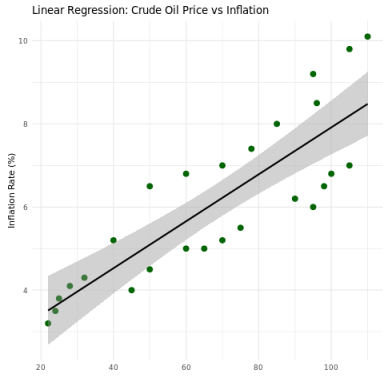

Crude Oil Prices vs Inflation (2000...2025)

Linear Regression: Crude Oil Price vs Inflation

Supported languages

Deno	JavaScript	NodeJS	Python	Ruby	Go
C	C++	Java	C#	TypeScript	PHP
Bash	R	Octave (MATLAB)	Fortran	Lua	Erlang
SQL	MySQL	MongoDB	Clojure	D	Perl
Kotlin	Swift	Rust	Assembly		

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