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# Create the data frame

data <- data.frame(

Year = c(1990, 1993, 1996, 1999, 2002, 2005, 2008, 2011, 2014, 2017), Region =
rep("Stavropol kria", 10),

Birth_Rate = c(13.2, 13.8, 13.5, 14.0, 13.7, 14.2, 14.2, 13.9, 13.7, 13.2),

Death_Rate = c(12.0, 15.2, 12.9, 13.5, 13.2, 12.8, 14.1, 11.5, 11.1, 14.4),

NPG = c(1.2, -1.4, 0.6, 0.5, 0.5, 1.4, 0.1, 2.4, 2.6, -1.2),

GDW = c("High", "High", "High", "High", "High", "High", "Medium", "Medium", "Medium",
"High"),

Urbanization = c(47.5, 65.2, 56.7, 54.2, 55.5, 61.0, 57.0, 58.1, 59.0, 69.6) )

# Normalize the data for comparison

normalize <- function(x) { (x - min(x)) / (max(x) - min(x)) }

# Apply normalization

data$Birth_Rate_Norm <- normalize(data$Birth_Rate)

data$Death_Rate_Norm <- normalize(data$Death_Rate)

data$Urbanization_Norm <- normalize(data$Urbanization)

data$NPG_Norm <- normalize(data$NPG)

# Overlay histograms

hist(data$Birth_Rate_Norm,

main = "Overlay of Normalized Histograms",

xlab = "Normalized Values",

col = rgb(0, 0, 1, 0.5), # Semi-transparent blue for Birth Rate \

freq = FALSE,

breaks = 5)

hist(data$Death_Rate_Norm,

col = rgb(1, 0, 0, 0.5), # Semi-transparent red for Death Rate

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freq = FALSE,
breaks = 5,
add = TRUE)
hist(data$Urbanization_Norm,
col = rgb(0, 1, 0, 0.5), # Semi-transparent green for Urbanization
freq = FALSE,
breaks = 5,
add = TRUE)
hist(data$NPG_Norm,
col = rgb(1, 1, 0, 0.5), # Semi-transparent yellow for NPG
freq = FALSE,
breaks = 5,
add = TRUE)
# Add legend
legend("topright", legend = c("Birth Rate", "Death Rate", "Urbanization", "NPG"), fill =
c(rgb(0, 0, 1, 0.5), rgb(1, 0, 0, 0.5), rgb(0, 1, 0, 0.5), rgb(1, 1, 0, 0.5)))

png("overlay_histograms.png")
# Add the histogram overlay code here

dev.off()
```