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title: "Temperature and Precipitation Mini Project"  
output: html_document  
date: "2023-11-10"  
  
# Load the required libraries  
library(tidyverse)  
library(caret)  
  
# Load the dataset  
data <-  
read.csv("ccloud/project/Datasets/Temperature_And_Precipitation_Cities_IN/Bangalore_1990_2022_BangaloreCity.csv")  
  
# Select relevant features  
selected_features <- data %>%  
  select(city, year, temperature, precipitation)  
  
# Create new features using domain knowledge  
new_features <- selected_features %>%  
  mutate(temperature_celsius = (temperature - 32) * 5/9,  
         precipitation_mm = precipitation * 25.4)  
  
# Reduce the dimensionality of the data  
reduced_data <- new_features %>%  
  select(-temperature, -precipitation)  
  
# Print the final dataset  
print(reduced_data)
```