

# Adv Data Prog with R - Homework 1

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## Introduction

The **economics** dataset contains monthly U.S. economic indicators from January 1967 to December 2015. In this report, we focus on:

- **date** – Month/year of each observation
  - **unemploy** – Number of unemployed (in thousands)
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## Dataset Description

The **economics** dataset includes:

- **date**: The date of each monthly observation (from 1967-01 to 2015-12).
- **psavert**: Personal savings rate (percentage).
- **pop**: Total U.S. population (in thousands).
- **pce**: Personal consumption expenditures (in billions of dollars).
- **unemploy**: Number of unemployed individuals (in thousands).
- **uempmed**: Median duration of unemployment (in weeks).

*“Here, we use only **date** and **unemploy**, but knowing the other columns helps understand the broader context of the dataset.”*

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## Plotting

In this section, we create a **line chart** of U.S. monthly unemployment from January 1967 to December 2015



Unemployment remained at low level at late 1960s before the spikes around in 1975(~8,100) and in 1982(~12,000), And after 1990s, a peak found near 8,500 and it fell until the 2001 downturn, then soared to 14,000 in 2008-09(maybe of recession). Post 2009, the unemployment steadily declined to around 8,200 by 2015.