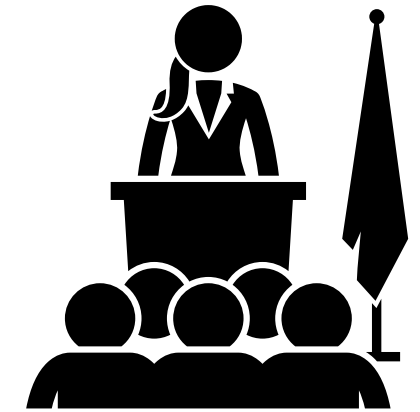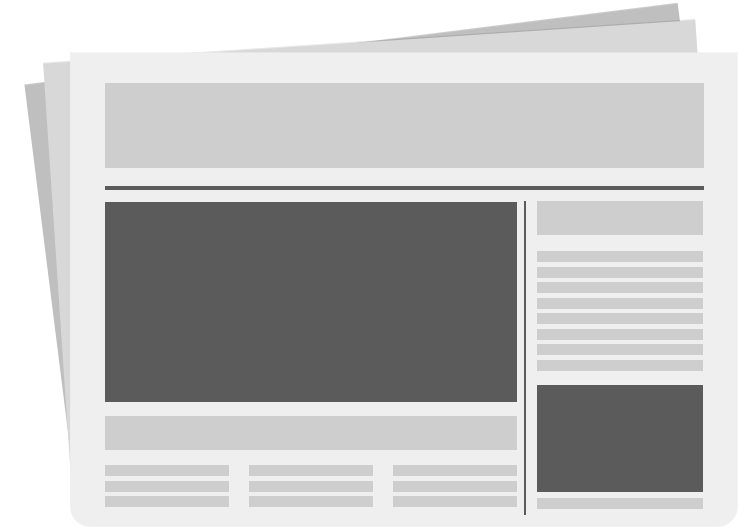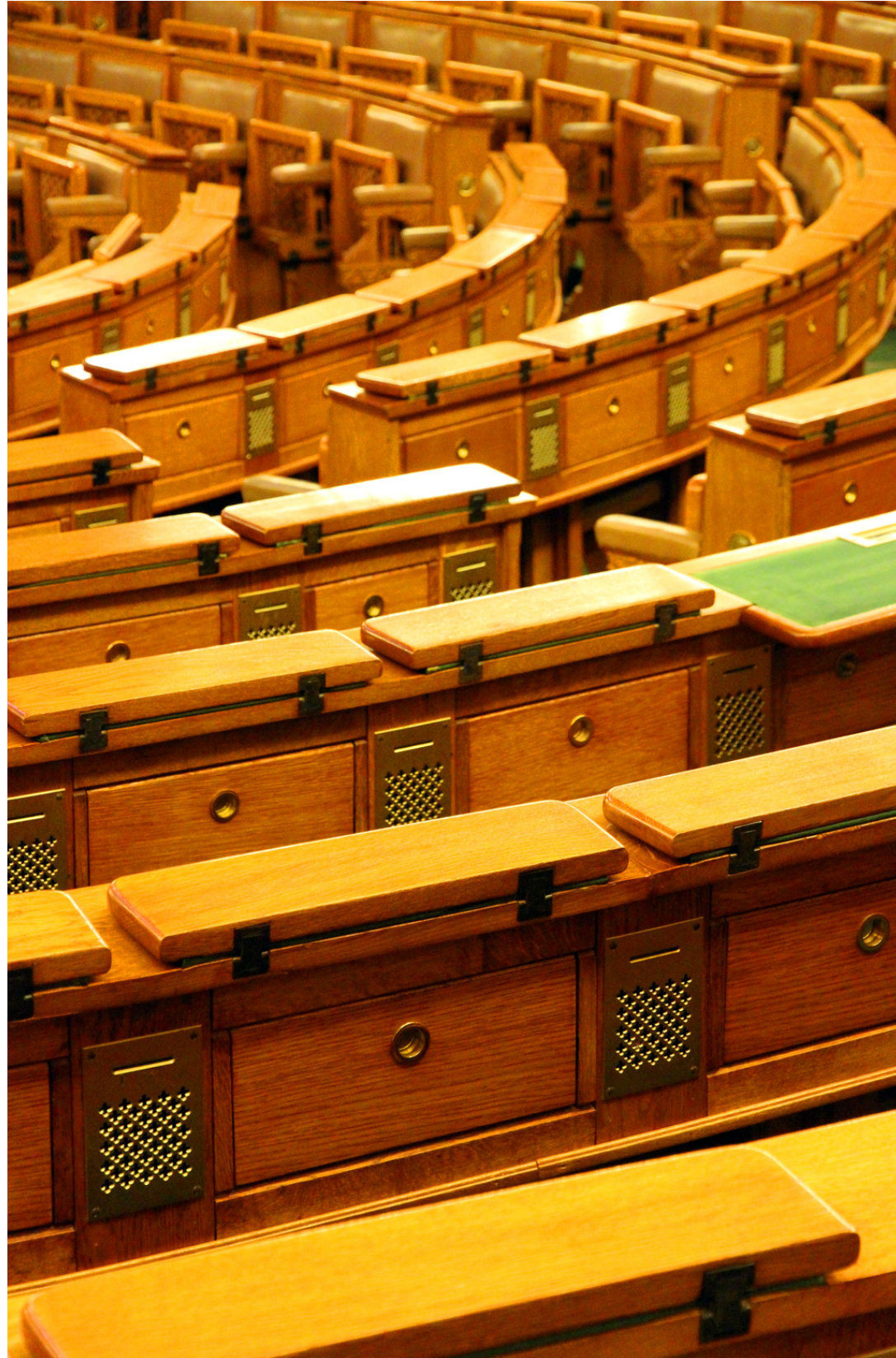# Activity

- You are a data analyst working for the government
- Today, the parliament has a hearing where they will discuss the budget of the next year
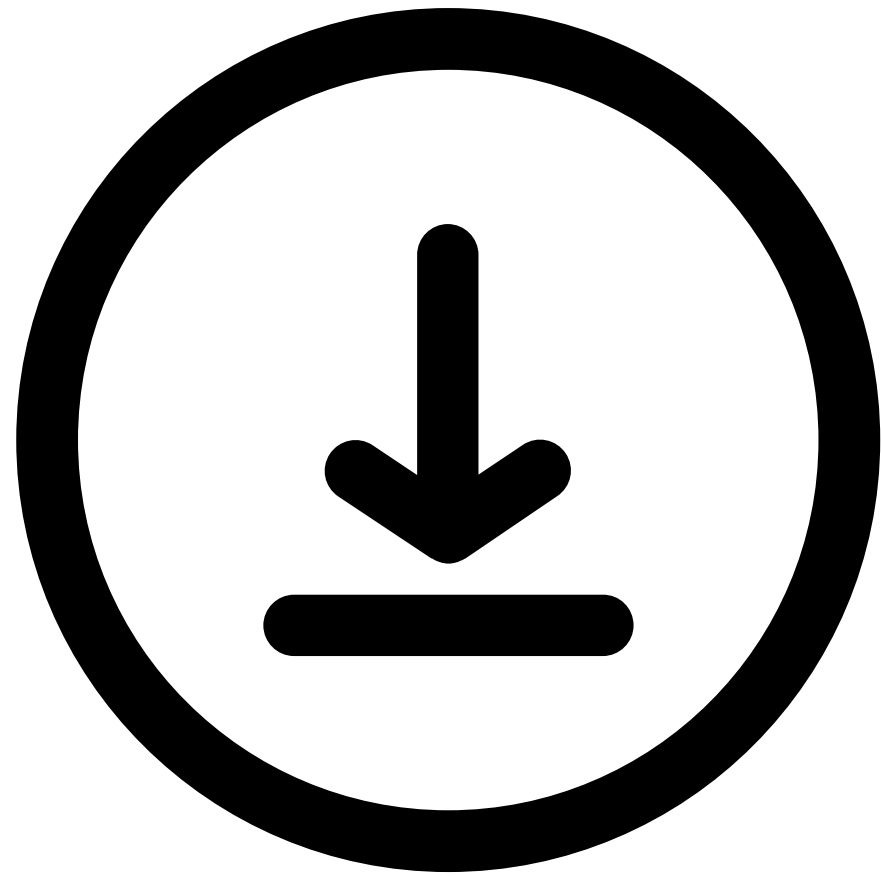- You are asked to create a report based on the available data

Activity

- **Many news reports say that employees are working extra hours and some departments needs to increase their human resources**
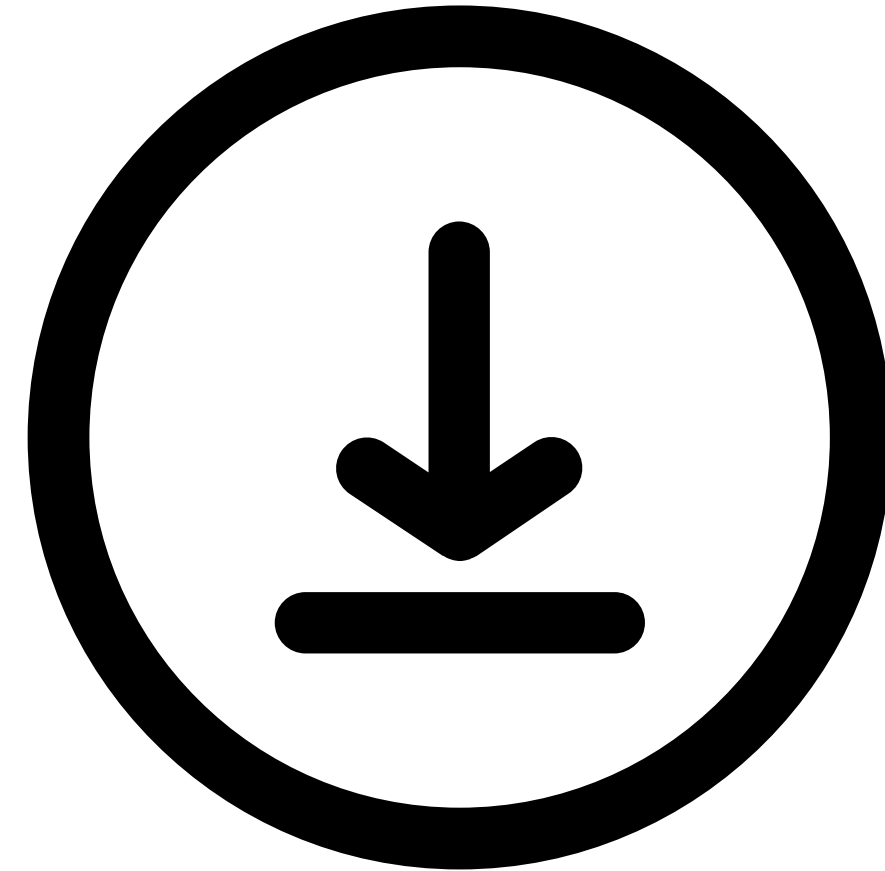
Activity

Download the data

OR

Activity

Manager guidelines
- Spending breakdown
  - Total Spending
  - Departments
- Highest paying departments
  - Highest paying divisions
- Departments distribution
- Overtime issue investigation
  - Assess the issue
  - Recommendations where to increase employees

Activity

Process guidelines
1. Propose questions
    ○ Question1: ?
    ○ Question2: ?
    ○ Question3: ?

Activity

Process guidelines
2. Data Assessing/Cleaning
   a. Check columns names
      i. Rename to convenient names
   b. Check number of duplicates
      i. Drop duplicates
   c. Check number of Null values
      i. Fill or drop the null values
      ii. Can null values be derived from other columns?
   d. Report the major dataset stats
      i. Number of columns
      ii. Number of rows
      iii. Meta Info

Activity

Process guidelines
 3.Explore
  1.Univariate
     a.Salary distribution/mean/median
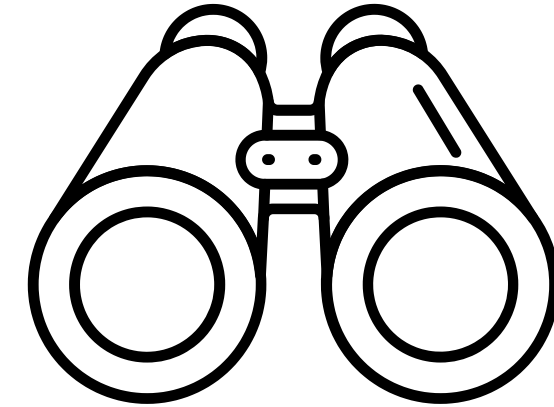   b.Gender distribution
  2.Multivariate/Bivariate
     a.Department with salaries
     b.Departments with overtime
  3.Various plots
     a.Pie chart
     b.Bar chart

Activity

Process guidelines
4. Draw conclusions
   - Hint: remember the overtime issue

Activity

Good evening!