# Excel Filtration Tool in Python - V-1

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## Purpose

This script reads an Excel file and searches for a specific value in a specified column, then returns the search results.

## Requirements

- pandas: Used for data manipulation and analysis, providing powerful data structures like DataFrames and Series.

## Environment Setup

Ensure you have the `pandas` library installed. You can install it using the following command:  
```  
pip install pandas  
```

## Execution

1. Save the provided code in a file named `excel\_search.py`.  
2. Ensure the Excel file `data.xlsx` is in the same directory or provide the full path to the file.  
3. Open a terminal or command prompt.  
4. Navigate to the directory where `excel\_search.py` is saved.  
5. Run the program using the command:  
```  
python excel\_search.py  
```

## How It Works

1. Function `search\_excel(file\_path, sheet\_name, search\_column, search\_value)`:  
 - Parameters:  
 - `file\_path` (str): The path to the Excel file.  
 - `sheet\_name` (str): The name of the sheet to search in.  
 - `search\_column` (str): The name of the column to search in.  
 - `search\_value` (str): The value to search for in the specified column.  
 - Description:  
 - Reads the specified Excel file and sheet into a DataFrame.  
 - Searches for rows where the value in the specified column matches the search value.  
 - Returns the search results if found, otherwise returns a message indicating no matching records were found.

## Output

The program prints the search results if any records match the search criteria. If no matching records are found, it prints a message indicating that no matching records were found.