

Problem Statement:

Identify employees who do not have a company-issued device recorded in the "Devices" table.

Solution Approach:

To solve this problem, we will use Python and the `pandas` library to read the data tables and find employees who do not have a corresponding device entry.

Python Script:

Here is a Python script you can use:

```
find_missing_devices.py
```

Instructions to Run the Script:

1. **Install Python:** Ensure Python is installed on your machine. You can download it from python.org.
2. **Install Required Libraries:** Install the `pandas` library by running `pip install pandas`.
3. **Save the Script:** Save the above Python script to a file, e.g., `find_missing_devices.py`.
4. **Modify File Path:** Replace `'path_to_your_file/table_data.xlsx'` with the actual path to your Excel file.
5. **Run the Script:** Open a terminal or command prompt, navigate to the directory where the script is saved, and run:

```
python find_missing_devices.py
```

6. **Output:** The script will output the names of employees who do not have a recorded device.

Step-by-Step Instructions

Step 1: Install Python

Make sure you have Python installed on your system. You can download it from python.org. Follow the instructions provided for your operating system to complete the installation.

Step 2: Install Required Libraries

Open your terminal (on macOS or Linux) or Command Prompt (on Windows) and run the following command to install the required `pandas` library:

```
pip install pandas
```

Step 3: Save the Script

Create a new file named `find_missing_devices.py` in a directory of your choice. Copy and paste the following script into the file:

Step 4: Modify the File Path

Replace `'path_to_your_file/table_data.xlsx'` in the script with the actual path to your Excel file. For example:

- On Windows: `file_path = 'C:\\Users\\YourUsername\\Documents\\table_data.xlsx'`
- On macOS/Linux: `file_path = '/Users/YourUsername/Documents/table_data.xlsx'`

Step 5: Run the Script

1. Open your terminal or command prompt.
2. Navigate to the directory where you saved `find_missing_devices.py`:

Run the script by executing:

```
python find_missing_devices.py
```

Step 6: View the Output

The script will output the names of employees who do not have a device recorded in the "Devices" table. The output will look something like this:

Employees without a recorded device:

```
first_name last_name
0    Mike  Dalton
1    Mike  Manning
...
```