**Quick Guide to Getting a YouTube Data API Key**

Here’s a concise guide to obtaining a YouTube Data API key for this script:

**Steps to Get a YouTube Data API Key**

1. **Go to Google Cloud Console**:
   * Visit <https://console.cloud.google.com/>.
   * Sign in with your Google account.
2. **Create a Project**:
   * Click the project dropdown at the top (near "Google Cloud Platform").
   * Click **"New Project"**.
   * Name it (e.g., "YouTube Downloader") and click **"Create"**.
3. **Enable YouTube Data API**:
   * From the left menu, go to **"APIs & Services" > "Library"**.
   * Search for **"YouTube Data API v3"**.
   * Click it, then click **"Enable"**.
4. **Create Credentials**:
   * Go to **"APIs & Services" > "Credentials"**.
   * Click **"Create Credentials"** > **"API Key"**.
   * Your API key will be generated (e.g., AIzaSyxxxxxxxxxxxxxxxxxxxxxxxxxxxx).
5. **Add Key to Script**:
   * Copy the API key.
   * Open youtube\_downloader.py in a text editor.
   * Find the line API\_KEY = "" (around line 150).
   * Replace "" with your key, e.g., API\_KEY = "AIzaSyxxxxxxxxxxxxxxxxxxxxxxxxxxxx".
   * Save the file.
6. **Test the Script**:
   * Run python youtube\_downloader.py.
   * If set up correctly, it will proceed without the API key error.

**Notes**

* **Quota**: The free tier gives 10,000 units/day, sufficient for ~100 searches (each search costs ~100 units). For heavy use, you may need to request a quota increase or manage usage.
* **Security**: Don’t share your API key publicly. If distributing the script, instruct users to add their own key.