**Step 1: Set Up Your Project Environment**

1. **Create a New Folder:**
   * Open Visual Studio Code (VS Code).
   * Navigate to the Explorer panel.
   * Click on 'Open Folder' and create a new folder for your project.

**Step 2: Create the Python Script**

1. **Inside your project folder:**
   * Create a new file named idea\_agent.py.
2. **Add the Following Code to idea\_agent.py:**

import os

import requests

from googleapiclient.discovery import build

from dotenv import load\_dotenv

# Load API keys from environment variables

load\_dotenv()

YOUTUBE\_API\_KEY = os.getenv("YOUTUBE\_API\_KEY")

youtube = build("youtube", "v3", developerKey=YOUTUBE\_API\_KEY)

def get\_top\_trending\_titles(category):

"""Fetch top 5 trending YouTube videos related to the given category."""

request = youtube.search().list(

part="snippet",

maxResults=5, # Fetch top 5 trending videos

q=category,

type="video",

order="viewCount"

)

response = request.execute()

# Extract and return top 5 video titles

return [item["snippet"]["title"] for item in response.get("items", [])]

# User input

category = input("Enter a category (e.g., tech, gaming, finance): ").strip()

trending\_titles = get\_top\_trending\_titles(category)

# Display results

print("\nTop 5 Trending YouTube Video Titles:")

for idx, title in enumerate(trending\_titles, start=1):

print(f"{idx}. {title}")

**Step 3: Configure Environment Variables**

1. **In your project folder:**
   * Create a new file named .env.
2. **Inside the .env file:**
   * Add the following line:  
     YOUTUBE\_API\_KEY="your\_api\_key"
   * Replace "your\_api\_key" with your actual YouTube Data API key.

**Step 4: Specify Project Dependencies**

1. **In your project folder:**
   * Create a new file named requirements.txt.
2. **Inside the requirements.txt file:**

List the necessary dependencies:  
 requests

Google-api-python-client

python-dotenv

**Step 5: Install Dependencies**

1. **Open the terminal in VS Code:**
2. **Install the dependencies by running:**  
   pip install -r requirements.txt

**Step 6: Run the Script**

1. **In the terminal:**
   * Execute the script by running:  
     python idea\_agent.py