

## Interactive Lab – Build Your First AI Research Flow

### Objective

You'll build a simple, powerful automation in **n8n** that:

1. Takes a user topic
  2. Uses **Perplexity** to research it
  3. Uses **ChatGPT** to summarize the results
  4. Optionally, displays or stores the output
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### What You'll Need

- An [n8n.io](https://n8n.io) account (desktop or cloud)
  - API keys for:
    - **Perplexity** (or another research tool)
    - **OpenAI (ChatGPT)**
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## Step-by-Step Instructions

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### Step 1: Create a New Workflow

1. Log in to your n8n dashboard.
2. Click “**New Workflow**” in the top right.

3. Name it something like: **AI Research-to-Summary Flow**.

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### ✅ Step 2: Add a Manual Trigger

1. Click “+” and search for **Start**.
2. Select **Manual Trigger** (it lets you test the workflow manually).
3. Click **Save**.

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### ✅ Step 3: Add a Perplexity Node (Research)

1. Click the “+” button after your trigger.
2. Search for and select **HTTP Request** (Perplexity doesn’t have a native node).
3. Set it up:
  - **Method:** **POST**
  - **URL:** **https://api.perplexity.ai/your-endpoint** (replace with correct URL)
  - **Headers:**
    - **Authorization:** **Bearer YOUR\_API\_KEY**
    - **Content-Type:** **application/json**

#### Body (JSON):

json

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```
{  
  "query": "Research the topic: {{$json.topic}}. Return 3  
key facts."  
}
```

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💡 You can hardcode "AI in education" instead of  
{{\$json.topic}} if you're not yet collecting dynamic input.

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#### ✅ Step 4: Add a ChatGPT Node (Summary)

1. Click "+", then choose the **OpenAI** node.
2. Set **Resource** to **Completion** or **Chat**.

Prompt:

arduino

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Based only on the facts: {{\$json.result}}, write a concise  
100-word summary.

- 3.
  4. Choose your **model** (e.g., **gpt-3.5-turbo**)
  5. Connect it to the **Perplexity** node.
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#### ✅ Step 5: Add an Output Node (Optional)

Choose one:

**Option A – View in Set Node**

1. Add a **Set** node after ChatGPT
2. Set a field like `summary =`  
`{{ $json.choices[0].message.content }}`

### Option B – Save to File

1. Add a **Write Binary File** node to save the summary to disk (desktop n8n only).

### Option C – Send to Google Sheets or Airtable

1. Add the appropriate integration node
  2. Map `summary` field to your chosen column
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## Test Your Flow

1. Click **Execute Workflow**
  2. Input a topic like **“AI in education”** (in the Perplexity body or via manual input node)
  3. Watch your research + summary flow execute in real time
  4. Review the result in the output node
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## Bonus Challenges

- Swap Perplexity with another research source (e.g., SerpAPI or custom GPT)

- Add a **Webhook Trigger** to take topics via form or chatbot
- Add formatting (Markdown, list, JSON) to ChatGPT's output
- Automatically email or publish the result