## **Objective**

The goal of this code is to **automatically evaluate resumes** submitted by candidates and compare them with the job description to see how well the candidates match the job requirements. The final output will show a **score** for each section of the resume (like Education, Experience, and Skills), indicating how closely the resume matches the job description.

#### **How it Works**

#### 1. Reading the Resume (in PDF format):

- The tool can read resumes that are saved as PDF files.
- It goes through each page of the resume and extracts the text (like the candidate's qualifications, work history, skills, etc.) to be used for comparison with the job description.

#### 2. Breaking Down the Resume:

- Resumes typically have different sections, such as "Education," "Work Experience," "Skills," and so on.
- The code looks for specific keywords (like "Education" or "Experience") to identify and separate these sections in the resume.
- For example, if the resume mentions "Education," the tool will take everything that follows under this heading and treat it as the Education section.

### 3. Job Description Breakdown:

- The job description provided by the company is also divided into sections like "Required Education," "Work Experience," and "Skills Needed."
- Each part of the job description outlines what the company is looking for in an ideal candidate, such as specific degrees, years of experience, or particular skills (e.g., Python programming).

### 4. Comparing the Resume to the Job Description:

- Once the resume and the job description are divided into sections (Education, Experience, Skills), the tool compares each section of the resume with the matching section from the job description.
- o For example:
  - The **Education** section of the resume will be compared to the **Education** requirements from the job description.
  - The **Experience** section of the resume will be compared to the **Experience** section in the job description.
  - This comparison happens **automatically** based on the content of both documents.

#### 5. Scoring the Match:

- The tool calculates a similarity score for each section. This score tells how well the candidate's resume matches that specific part of the job description:
  - A score of **1.0** means a perfect match (the resume and job description are very similar in that section).

- A lower score means the resume is less similar to what the company is looking for in that section.
- For example, if the job requires a "Bachelor's degree in Computer Science," but the resume lists a "Bachelor's degree in Marketing," the **Education** section will likely get a lower score.

#### 6. Results:

- The tool outputs a similarity score for each section (Education, Experience, Skills, etc.).
- These scores give an idea of how well the candidate meets the job requirements based on the information in their resume.

### Why This is Useful:

- Automates Resume Review: Instead of manually reviewing every resume, this tool automatically compares each candidate's qualifications to the job requirements.
- Ranks Candidates: Companies can use the scores to rank candidates and identify the best matches for the job, saving time and effort.
- Section-Based Analysis: It looks at individual sections (Education, Skills, Experience) instead of treating the resume as a single block of text, which gives a more precise comparison.
- **Customizable:** The tool can be adapted to different job descriptions and types of resumes, so it can be used for a variety of roles and industries.

# **Summary:**

This tool **reads resumes**, **splits them into key sections** (like Education and Experience), and **compares** these sections with the job description. It then provides a score for each section, showing how closely the candidate's qualifications match what the company is looking for. This makes it easier for companies to quickly find the best candidates for a job.