Automation Category	Python Packages
1. Web Scraping	requests, BeautifulSoup, Selenium, Scrapy, Playwright
2. File Management	os, shutil, pathlib, watchdog
3. Email Automation	smtplib, imaplib, email, yagmail
4. Data Cleaning	pandas, numpy, openpyxl, pyjanitor
5. Data Analysis & Reporting	pandas, numpy, matplotlib, seaborn, plotly
6. Excel/Spreadsheet Automation	openpyxl, xlrd, pandas, gspread, pyxlsb
7. PDF Processing	PyPDF2, pdfminer.six, pdfplumber, reportlab
8. Image Processing	Pillow, opencv-python, scikit-image, imageio
9. Text Extraction (OCR)	pytesseract, easyocr, ocrmypdf
10. Browser Automation	Selenium, Playwright, Pyppeteer, Helium
11. APIs and Webhooks	requests, httpx, flask, fastapi
12. Chatbot/Assistant	ChatterBot, Rasa, transformers, Langchain
13. Task Scheduling	schedule, APScheduler, croniter, celery
14. GUI Automation	pyautogui, pynput, keyboard, pywinauto
15. Natural Language Processing	nltk, spaCy, transformers, gensim, textblob
16. Speech Recognition	speechrecognition, whisper, pyaudio, vosk
17. Voice Assistant Tasks	pyttsx3, speechrecognition, whisper, openai
18. Database Automation	sqlite3, SQLAlchemy, psycopg2, pymysql, pandas

19. Monitoring & Alerting	psutil, prometheus_client, watchdog, smtplib
20. Cloud Automation	boto3 (AWS), google-cloud-*, azure-*, terraform-exec
21. Social Media Automation	tweepy (Twitter), instabot, facebook-sdk, pywhatkit
22. Slack/Discord Bots	slack_sdk, discord.py, slack_bolt
23. PDF/Doc Report Generation	reportlab, docxtpl, pdfkit, weasyprint, Jinja2
24. CI/CD Tasks	subprocess, gitpython, os, Docker SDK
25. Testing Automation	unittest, pytest, tox, selenium, robotframework
26. IoT Automation	gpiozero, paho-mqtt, pyserial, Adafruit libraries
27. Home Automation	Home Assistant, openHAB, python-openzwave, pyHS100
28. Document Conversion	docx2pdf, pandoc, pdf2image, pypandoc
29. Image/Video Processing	opencv-python, moviepy, ffmpeg-python, imageio
30. Automation with AI	openai, transformers, langchain, llama-index, autogen
31. Project Management Tools (Jira, Trello)	jira, py-trello, asana, monday
32. Time Tracking & Logging	time, datetime, schedule, pytz
33. Financial Data Automation	yfinance, alpaca-trade-api, ccxt, pandas_datareader