

## PDF MERGER PROGRAM — CONCEPT NOTES

### 1. Core Python Concepts

- import: to use external libraries
- lists: store multiple file paths
- loops (for, while): repeat tasks
- try-except: error handling
- input(): take user input
- str.strip(): removes extra spaces
- os.path.isfile(): checks if file exists
- functions/methods: append(), write(), close()

### 2. Modules Used

- PyPDF2: PdfMerger to merge PDFs
- os: verify file paths

### 3. Program Logic

- Ask number of PDFs
- Validate input (must be number)
- Take file paths & verify existence
- Store valid paths
- Append PDFs using PdfMerger
- Save merged file

### 4. Key Learnings

- Robust input validation
- Working with files & directories
- Using Python libraries to automate tasks
- Practical use of loops + conditions
- Building real-world automation tools

### 5. Practice Tasks

Beginner:

- Take numbers & store in list
- Ask for file names & check existence

Intermediate:

- Merge text files instead of PDF
- Merge all files in folder automatically

Advanced:

- Build GUI tool using Tkinter
- Add custom output file name
- Sorting PDFs before merging

