

PyPDF Notes (Quick Reference)

Installation

```
pip install pypdf
```

Main Classes

- PdfReader → Open and read PDF files.
 - PdfWriter → Create or modify PDF files.
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Reading a PDF

```
from pypdf import PdfReader

reader = PdfReader("sample.pdf")

print(len(reader.pages))      # number of pages
page = reader.pages[0]       # get first page
print(page.extract_text())    # extract text
```

Writing / Creating a PDF

```
from pypdf import PdfWriter

writer = PdfWriter()
writer.add_blank_page(width=200, height=200)

with open("blank.pdf", "wb") as f:
    writer.write(f)
```

Merging PDFs

```
from pypdf import PdfWriter

writer = PdfWriter()
writer.append("file1.pdf")
writer.append("file2.pdf")

with open("merged.pdf", "wb") as f:
    writer.write(f)
```

Extracting Specific Pages

```
from pypdf import PdfReader, PdfWriter

reader = PdfReader("sample.pdf")
writer = PdfWriter()

writer.add_page(reader.pages[0])    # only first page
writer.add_page(reader.pages[2])    # third page

with open("output.pdf", "wb") as f:
    writer.write(f)
```

Rotating Pages

```
page = reader.pages[0]
page.rotate(90)    # rotate clockwise 90°
writer.add_page(page)
```

Cropping Pages

```
page = reader.pages[0]
page.mediabox.lower_left = (50, 50)
page.mediabox.upper_right = (400, 400)
writer.add_page(page)
```

Adding Metadata

```
writer.add_metadata({
    "/Author": "Zahid",
    "/Title": "My PDF File"
})
```

Password Protection (Encryption)

```
writer.encrypt("mypassword")

with open("secure.pdf", "wb") as f:
    writer.write(f)
```

Summary

- Use PdfReader → to **read & extract**.
- Use PdfWriter → to **create, edit, merge, secure**.
- pypdf = modern, supported → **preferred choice**.