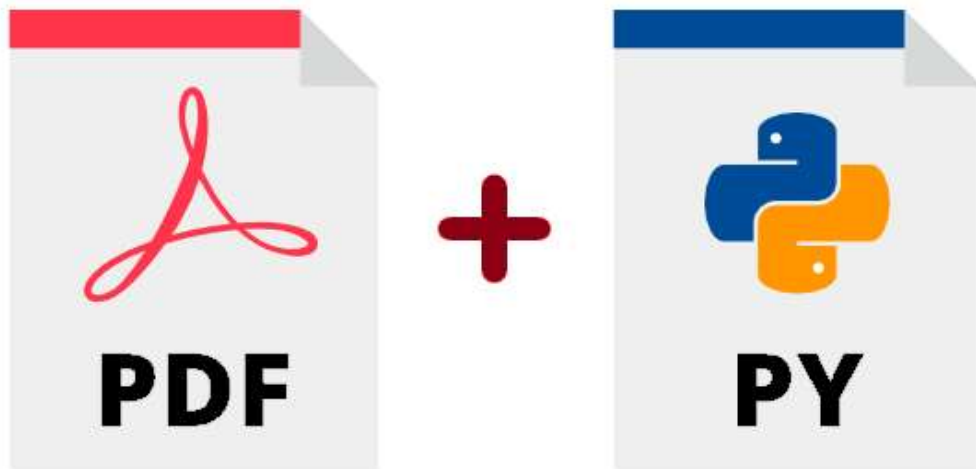


# Pdf in Python by PyPDF3



## What is PyPDF3?

PyPDF3 is a pure-python library for working with PDF files.

We can use PyPDF3 to:

- Extract document information from a PDF file in Python
- Rotate pages
- Merge PDFs
- Split PDFs

- Add watermarks
- Encrypt a PDF

## 1. How to install and use the PyPDF3

In the pip write => `pip install PyPDF3`

Using PyPDF3 => `import PyPDF3 as MyPdf`

=====

## 2. Extracting document information (Title, Author , ...)

We can extract these information from Pdf file:

- Number of pages
- Author
- Creator
- Producer
- Subject
- Title
- ...

```

#-----

import PyPDF3 as MyPdf

#----- open pdf file & create pdf reader object -----

MyPdfFile = open("files/test.pdf", "rb")

pdf_reader = MyPdf.PdfFileReader(MyPdfFile, strict=True)

#----- get data from pdf file -----

print(pdf_reader.getNumPages())

doc_info = pdf_reader.getDocumentInfo()

print(doc_info)

#----- Go through all data -----

for item in doc_info:

    print("Item: ", item)

    print("Value: ", doc_info[str(item)])

    #-----

    FullInfo = str(item).removeprefix("/") + ":" + doc_info[str(item)]

    print(FullInfo)

#----- Get info one by one -----

DocAuthor = doc_info['/Author']

DocCreator = doc_info['/Creator']

DocProducer = doc_info['/Producer']

```

```
DocSubject=doc_info['/Subject']
DocTitle=doc_info['/Title']
DocCreationDate=doc_info['/CreationDate']
```

```
#-----Combile all info -----
```

```
info=f"""
```

```
Author:{DocAuthor} _
```

```
Creator:{DocCreator} _
```

```
Producer:{DocProducer} _
```

```
Subject:{DocSubject} _
```

```
Title:{DocTitle} _
```

```
CreationDate:{DocCreationDate}
```

```
"""
```

```
#-----
```

```
print(info)
```

```
MyPdfFile.close()
```

```
=====
```

## 2. Rotating PDF pages

#-----

**import PyPDF3 as MyPdf**

*#-----open pdf file & create pdf reader object -----*

**OrgPdfFile** = **open**("files/test.pdf", "rb")

**pdf\_reader** = **MyPdf.PdfFileReader**( **OrgPdfFile** , **strict=False** )

*# ---- create a pdf writer for new pdf file ---*

**PdfWriter** = **MyPdf.PdfFileWriter**()

*# ----- rotate all pages one by one -----*

**for** page **in** **range**(pdf\_reader.numPages):

```

# ----- create rotated page object -----
pageObj = pdf_reader.getPage(page)
pageObj.rotateClockwise(90) # rotation degree
#----- add rotated page object to pdf writer-----
PdfWriter.addPage( pageObj )

#----- create new pdf file object -----
NewPdfFile = open( "files/rotated_Pdf_File.pdf", "wb")
# ----- write rotated pages to new pdf file-----
PdfWriter.write( NewPdfFile )
# ----close the original pdf file -----
OrgPdfFile.close()
# -----close the new pdf file -----
NewPdfFile.close()

```

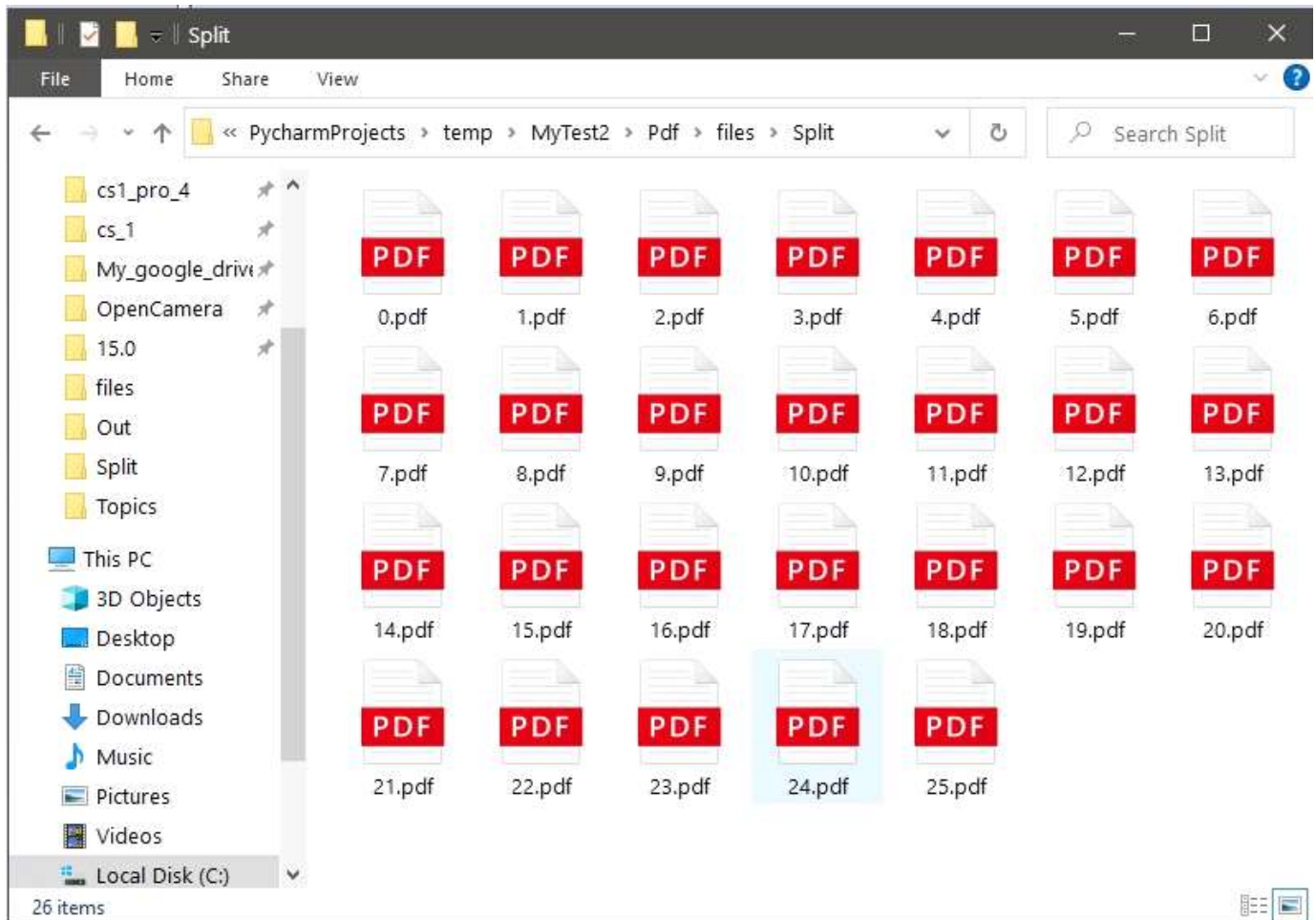
=====

### 3. Merging PDF files

```
#-----  
  
import PyPDF3 as MyPdf  
  
# ----- create pdf file merger object -----  
  
PdfMerger = MyPdf.PdfFileMerger(strict=False)  
  
# ----- append pdf files one by one -----  
  
PdfMerger.append("files/Test_Pillow.pdf")  
PdfMerger.append("files/test.pdf")  
  
# ----- write the combined pdf to output pdf file -----  
  
MergedPdfFile=open("files/MergedPdf.pdf", "wb")  
PdfMerger.write(MergedPdfFile)  
  
#-----  
  
PdfMerger.close()  
  
MergedPdfFile.close()
```

=====

## 4. Splitting PDF file



```
import PyPDF3 as MyPdf
```

```
#-----open pdf file & create pdf reader object -----
```

```
OrgPdfFile = open("files/Test_Pillow.pdf","rb")
```



```

pdf_reader=MyPdf.PdfFileReader( OrgPdfFile , strict=False )

#-----split all pages one by one -----
for page in range(pdf_reader.getNumPages()):
    # -----create pdf reader object -----
    pdf_reader = MyPdf.PdfFileReader(OrgPdfFile, strict=False)

    # ---- create a pdf writer for new pdf file ---
    PdfWriter = MyPdf.PdfFileWriter()
    # -----
    PdfWriter.addPage(pdf_reader.getPage(page))

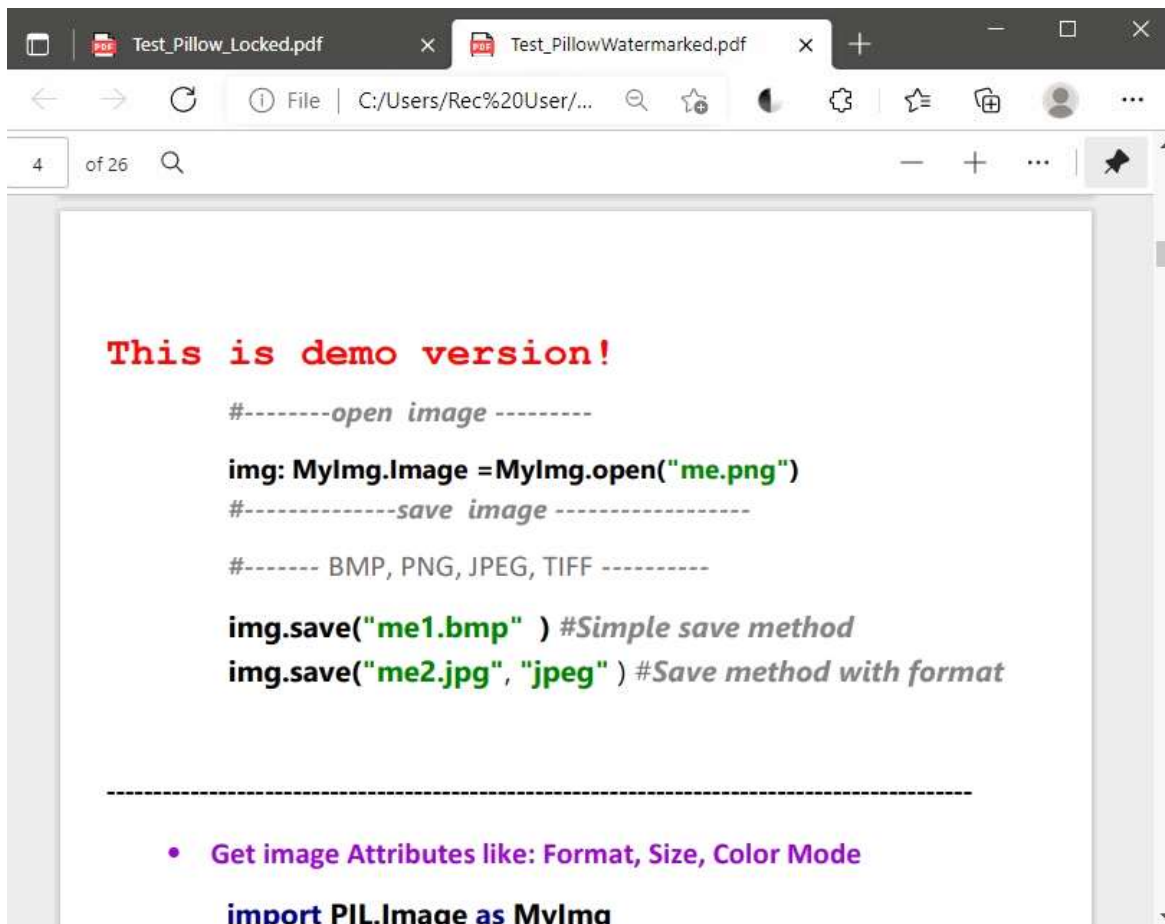
    # -----create splitted file name -----
    SplittedPdfFileName = str(page)+".pdf"

    # ----- create new pdf file object -----
    SplitPdfFile = open("files/split/"+SplittedPdfFileName, "wb")
    PdfWriter.write(SplitPdfFile)
    SplitPdfFile.close()

=====

```

## 5. Adding watermark to PDF pages



**import PyPDF3 as MyPdf**

*#-----Open watermark pdf file -----*

**watermark = "files/test.pdf"**

**WmPdfFile = open(watermark, "rb")**

*#-----Create pdf reader file for watermark-----*

**WmFileReader = MyPdf.PdfFileReader(WmPdfFile, strict=False)**

```

WaterMarkPage = WmFileReader.getPage(0)
#-----open original pdf file & create reader--
originalfile = "files/Test_Pillow.pdf"
OrgPdfFile = open(originalfile, "rb")
OrgPdfReader = MyPdf.PdfFileReader(OrgPdfFile, strict=False)
#-----create pdf writer for out file-----
PdfOutWrite = MyPdf.PdfFileWriter()
#-----
for page in range(OrgPdfReader.getNumPages()):
    #----- get the current page of original pdf -----
    OrgPdfPage:MyPdf.pdf.PageObject= OrgPdfReader.getPage(page)
    #-----merger vm to current page of original pdf ---
    OrgPdfPage.mergePage(WaterMarkPage)
    #-----
    PdfOutWrite.addPage(OrgPdfPage)

#-----save watermarked file -----
watermarkedfile = "files/Test_PillowWatermarked.pdf"
OutPdfFile=open(watermarkedfile, 'wb')
PdfOutWrite.write(OutPdfFile)

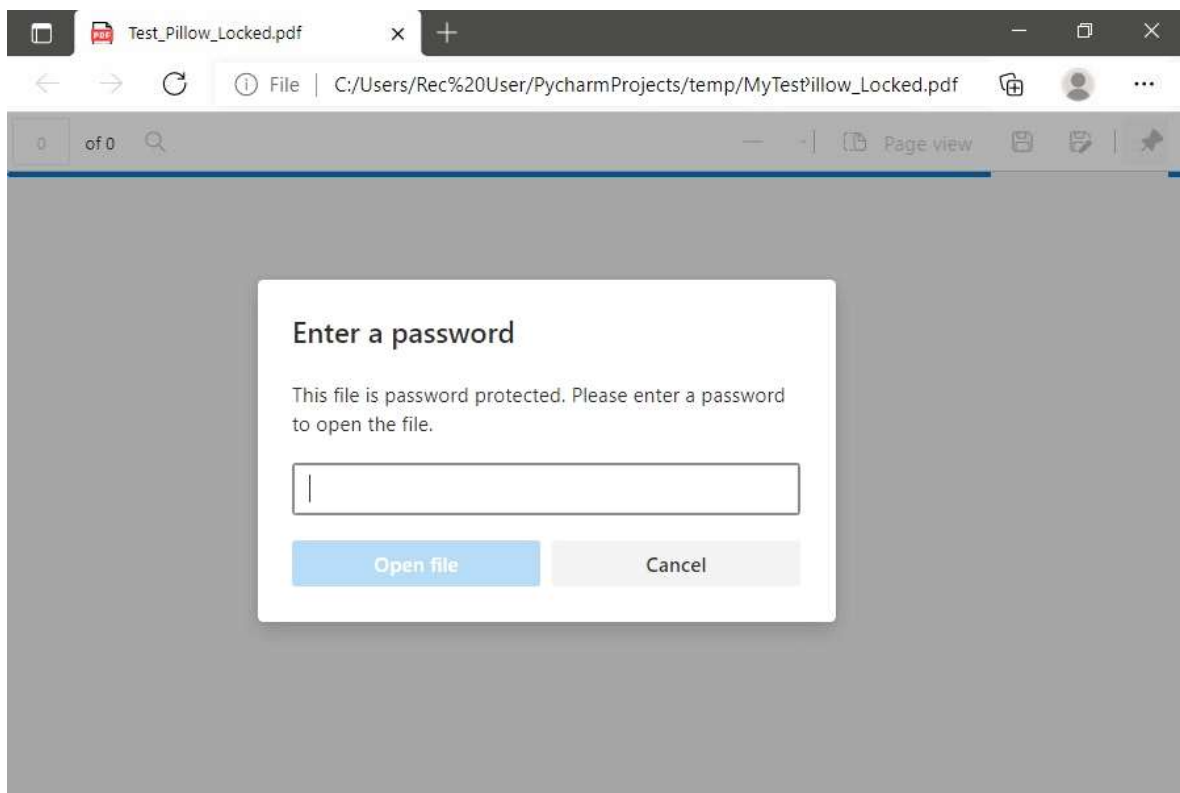
#-----close all open files ----
WmPdfFile.close()
OrgPdfFile.close()

```

OutPdfFile.close()

=====

## 6. How to Encrypt a PDF



#-----

**import PyPDF3 as MyPdf**

*#-----open pdf file & create pdf reader object -----*

```

OrgPdfFile = open("files/test.pdf", "rb")
pdf_reader = MyPdf.PdfFileReader( OrgPdfFile , strict=False )
# ---- create a pdf writer for new pdf file ---
PdfWriter = MyPdf.PdfFileWriter()

#----- Copy source Pdf to Pdf writer -----
for page in range(pdf_reader.getNumPages()):
    PdfWriter.addPage(pdf_reader.getPage(page))

#-----Encrypt Pdf file-----
# owner_pwd => No restrictions
# user_pwd => Custom restrictions
PdfWriter.encrypt(user_pwd="111", owner_pwd=None,
use_128bit=True)

#-----Save Encrypted file -----
output_pdf_file= open("files/Test_Pillow_Locked.pdf", 'wb')
PdfWriter.write(output_pdf_file)

OrgPdfFile.close()

```

