

To convert an HTML file with an external CSS file into a PDF using Python, you can use a library called **pdfkit**, which is a Python wrapper for **wkhtmltopdf**. This tool allows you to generate PDF files from HTML documents while preserving styles from the linked CSS.

Here's a step-by-step guide on how to do this:

## Step 1: Install the Required Tools

1. **Install wkhtmltopdf** You need to install `wkhtmltopdf`, which is the underlying tool used by `pdfkit` to convert HTML to PDF. On Ubuntu, you can install it with:

```
bash sudo apt update sudo apt install wkhtmltopdf
```

On other systems, you can download it from [wkhtmltopdf official downloads](#).

2. **Install the pdfkit Python Library** After `wkhtmltopdf` is installed, install the `pdfkit` library using `pip`:

```
bash pip install pdfkit
```

## Step 2: Write the Python Script

Once the necessary tools are installed, you can use the following Python script to convert an HTML file with an external CSS file into a PDF:

```
```python import pdfkit
```

# Path to your HTML file and CSS file

```
htmlfile = 'example.html' cssfile = 'style.css' output_pdf = 'output.pdf'
```

# Define options for wkhtmltopdf

```
options = { 'encoding': 'UTF-8', # Set character encoding 'no-outline': None, # Disable outline in the PDF 'enable-local-file-access': None # Enable local file access for CSS }
```

# Convert HTML file to PDF

# with CSS

```
pdfkit.fromfile(htmlfile, outputpdf, options=options, css=cssfile)

print(f'HTML with CSS has been converted to {output_pdf}') ``
```

## Step 3: Prepare Your HTML and CSS

Ensure that your HTML and CSS files are in the same directory or provide absolute paths to the files. Here's an example structure:

- `example.html`
- `style.css`
- `convert_to_pdf.py`

For example, `example.html` could look like this:

```
``html
```

# Hello, PDF!

This is an example of converting HTML with CSS into a PDF using Python.

```
``
```

And `style.css` could look like this:

```
``css body { font-family: Arial, sans-serif; line-height: 1.6; margin: 20px; }

h1 { color: #2c3e50; } ``
```

## Step 4: Run the Python Script

After preparing the HTML, CSS, and Python script, run the script:

```
bash python convert_to_pdf.py
```

This will generate `output.pdf` with the styles from `style.css` applied to the HTML content.

## Step 5: View the PDF

Once the script runs successfully, you should find `output.pdf` in the same directory. You can open it using any PDF viewer to check the result.

## Optional: Convert HTML from URL or String

If you want to convert HTML content from a URL or string instead of a file, you can use the following methods:

1. **Convert HTML from URL:** `python pdfkit.from_url('https://example.com', 'output.pdf')`

2. **Convert HTML from String:** `python html_string = """ <html><head><link rel="stylesheet" href="style.css"></head> <body>  
<h1>Test</h1><p>This is a test</p></body></html> """ pdfkit.from_string(html_string, 'output.pdf', css='style.css')`

With this approach, you can easily convert HTML files with CSS styling into PDF using Python.