

# File Handling

## ☐☐ Python File Handling — Q & A (with code)

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**Q1:** How do you read a file line-by-line safely in Python?

**A:**

```
with open('data.txt', 'r') as f:  
    for line in f:  
        print(line.strip())
```

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**Q2:** How do you write a list of lines to a file in Python?

**A:**

```
lines = ['one\n', 'two\n', 'three\n']  
with open('output.txt', 'w') as f:  
    f.writelines(lines)
```

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**Q3:** How do you check if a file exists before opening it?

**A:**

```
import os
if os.path.exists('file.txt'):
    with open('file.txt') as f:
        print(f.read())
```

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**Q4:** How do you list all files in a folder with a `.txt` extension?

**A:**

```
import os
files = [f for f in os.listdir('my_folder') if f.endswith('.txt')]
print(files)
```

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**Q5:** How do you recursively list all `.jpg` files in a directory and its subdirectories?

**A:**

```
import os
jpgs = []
for root, dirs, files in os.walk('assets'):
    for f in files:
        if f.endswith('.jpg'):
            jpgs.append(os.path.join(root, f))
```

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**Q6:** How do you create a folder if it doesn't exist?

**A:**

```
import os
os.makedirs('my_folder', exist_ok=True)
```

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## Q7: How do you read and write JSON data using Python?

**A:**

```
import json

# Writing
data = {'name': 'Alice', 'age': 30}
with open('data.json', 'w') as f:
    json.dump(data, f, indent=4)

# Reading
with open('data.json') as f:
    loaded = json.load(f)
```

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## Q8: How do you move or rename a file?

**A:**

```
import shutil
shutil.move('old_name.txt', 'new_folder/new_name.txt')
```

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## Q9: How do you delete a file safely in Python?

**A:**

```
import os
if os.path.exists('to_delete.txt'):
```

```
os.remove('to_delete.txt')
```

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## Q10: How do you get the filename and extension separately?

A:

```
import os
path = '/path/to/file.jpg'
name, ext = os.path.splitext(os.path.basename(path))
print(name) # file
print(ext)  # .jpg
```

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Ready for me to export this as a  for Anki?

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