Implement s3 file manager using any python web framework(flask/django/...etc).
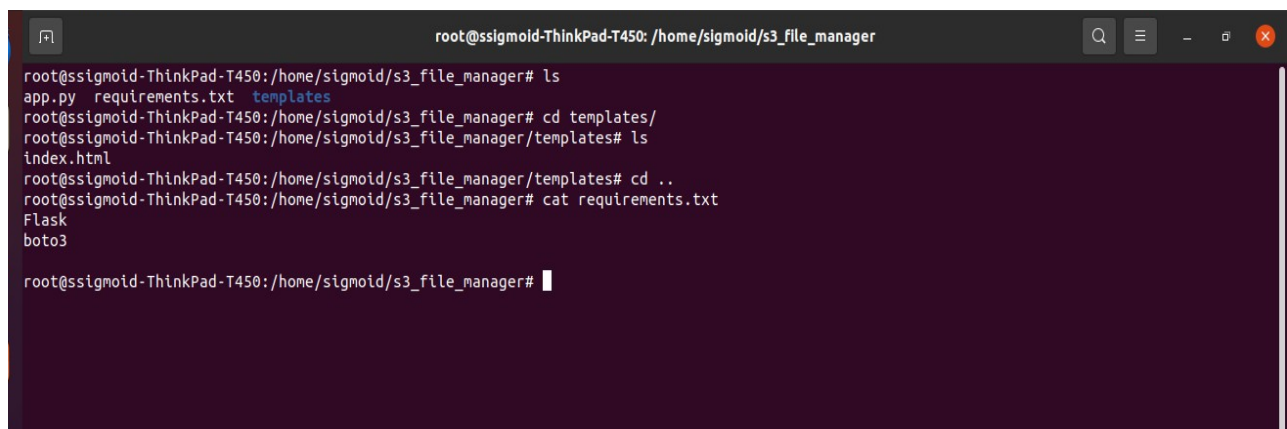functions :
1. List content of s3.
2. Create/Delete folder + bucket .
3. Upload files to s3 + delete file from s3.
4. Copy/Move file withing s3.
Note:
1. Make sure your code is readable
2. Make sure your app is working properly
3. Need basic UI from which we can access app

Created a directory for project and set up the basic file structure

```
s3_file_manager/
│
├──── app.py
│
├──── templates/
│     ├──── index.html
│
└──── requirements.txt
```


app.py

from flask import Flask, request, redirect, url_for, render_template
import boto3
from botocore.exceptions import NoCredentialsError
import os

app = Flask(__name__)

# Configure AWS credentials and S3 client
AWS_ACCESS_KEY_ID = 'AKIA6IY35U7L5LOBYXGN'
AWS_SECRET_ACCESS_KEY = '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'
s3 = boto3.client(
    's3',
    aws_access_key_id=AWS_ACCESS_KEY_ID,
    aws_secret_access_key=AWS_SECRET_ACCESS_KEY

```python
)

@app.route('/')
def index():
    try:
        # List all buckets
        buckets = s3.list_buckets().get('Buckets', [])
        bucket_names = [bucket['Name'] for bucket in buckets]
        return render_template('index.html', bucket_names=bucket_names)
    except NoCredentialsError:
        return "Credentials not available"

@app.route('/bucket/<bucket_name>')
def bucket_contents(bucket_name):
    try:
        # List objects in the specified bucket
        objects = s3.list_objects_v2(Bucket=bucket_name).get('Contents', [])
        files = [{'Key': obj['Key']} for obj in objects]
        return render_template('index.html', bucket_name=bucket_name, files=files)
    except NoCredentialsError:
        return "Credentials not available"

@app.route('/create_bucket', methods=['POST'])
def create_bucket():
    bucket_name = request.form['bucket_name']
    s3.create_bucket(Bucket=bucket_name)
    return redirect(url_for('index'))

@app.route('/delete_bucket', methods=['POST'])
def delete_bucket():
    bucket_name = request.form['bucket_name']
    s3.delete_bucket(Bucket=bucket_name)
    return redirect(url_for('index'))

if __name__ == '__main__':
    app.run(debug=True)
```

index.html

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>S3 File Manager</title>
    <style>
        body {
            font-family: Arial, sans-serif;
            margin: 20px;
        }
        form {
```

```
          margin-bottom: 20px;
        }
        h2 {
          margin-top: 20px;
        }
        .form-group {
          margin-bottom: 10px;
        }
        input[type="text"], input[type="file"] {
          padding: 8px;
          font-size: 16px;
        }
        button {
          padding: 8px 16px;
          font-size: 16px;
          cursor: pointer;
        }
        ul {
          list-style-type: none;
          padding-left: 0;
        }
        li {
          margin-bottom: 10px;
        }
    </style>
</head>
<body>
    <h1>S3 File Manager</h1>

    <!-- Create Bucket Form -->
    <h2>Create Bucket</h2>
    <form action="{{ url_for('create_bucket') }}" method="post">
        <div class="form-group">
          <input type="text" name="bucket_name" placeholder="Bucket Name" required>
        </div>
        <button type="submit">Create Bucket</button>
    </form>

    <!-- Delete Bucket Form -->
    <h2>Delete Bucket</h2>
    <form action="{{ url_for('delete_bucket') }}" method="post">
        <div class="form-group">
          <input type="text" name="bucket_name" placeholder="Bucket Name" required>
        </div>
        <button type="submit">Delete Bucket</button>
    </form>

    <!-- List Buckets -->
    <h2>Buckets</h2>
    <ul>
        {% for bucket in bucket_names %}
        <li><a href="{{ url_for('bucket_contents', bucket_name=bucket) }}">{{ bucket }}</a></li>
```
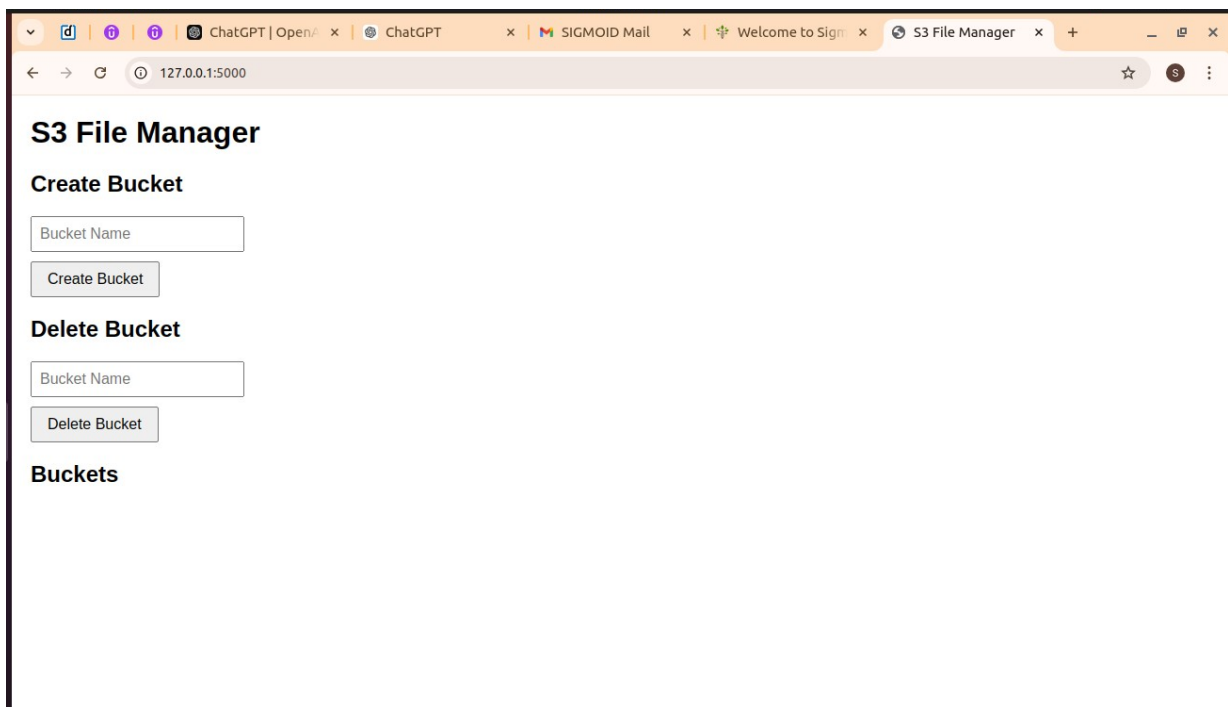
```
        {% endfor %}
    </ul>

</body>
</html>
```

Create Bucket

Delete Bucket

After deleting Bucket