

## 1. Continuous Integration (CI)

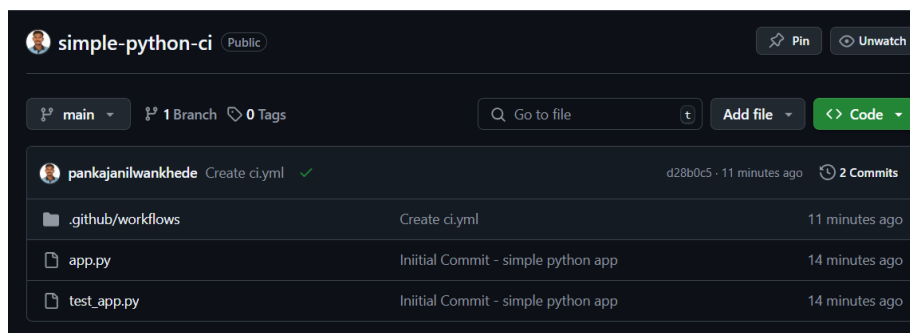
Task 1: Set Up a CI Pipeline Objective: Set up a basic CI pipeline that builds a project automatically whenever new code is pushed.

Step 1 : Created a simple application (Python)

```
test_app.py > ...
1  import app
2
3  def test_add():
4      assert app.add(2, 3) == 5
5
```

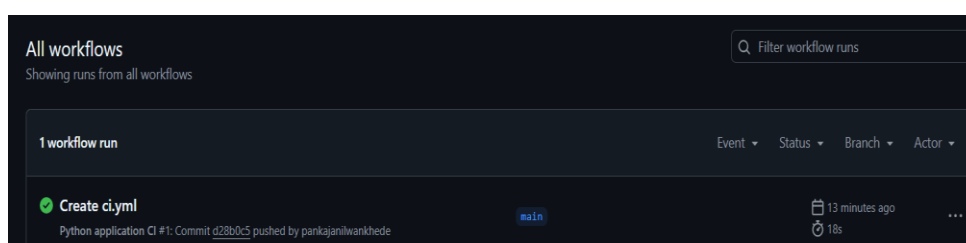
```
app.py > ...
1  def add(a, b):
2      return a + b
3
4  if __name__ == "__main__":
5      print("2 + 3 =", add(2, 3))
6
```

Step 2 : set up a github repository



The screenshot shows the GitHub repository page for 'simple-python-ci'. The repository is public and has 1 branch (main) and 0 tags. The commit history shows three commits: 'Create ci.yml' (11 minutes ago), 'Initial Commit - simple python app' (14 minutes ago), and 'Initial Commit - simple python app' (14 minutes ago). The files listed are '.github/workflows', 'app.py', and 'test\_app.py'.

Step 3 : Configure CI Pipeline



The screenshot shows the GitHub Actions workflow runs page. It displays a single workflow run for 'Create ci.yml' on the 'main' branch, triggered by a push event. The run status is 'Completed' and it took 18 seconds to complete. The commit hash is d28b0c5.