LAB5 - Starter Kit & Automation

Objective: Build a starter project environment automatically.

starter_kit.sh – Script

```
#!/bin/bash

# Create project directory structure
mkdir -p project/scripts
mkdir -p project/docs
mkdir -p project/data

# Add placeholder README.md in each subfolder
touch project/scripts/README.md
touch project/docs/README.md
touch project/data/README.md

# Final message
echo "Starter Kit Ready!"
```

LAB_extra.md – Documentation

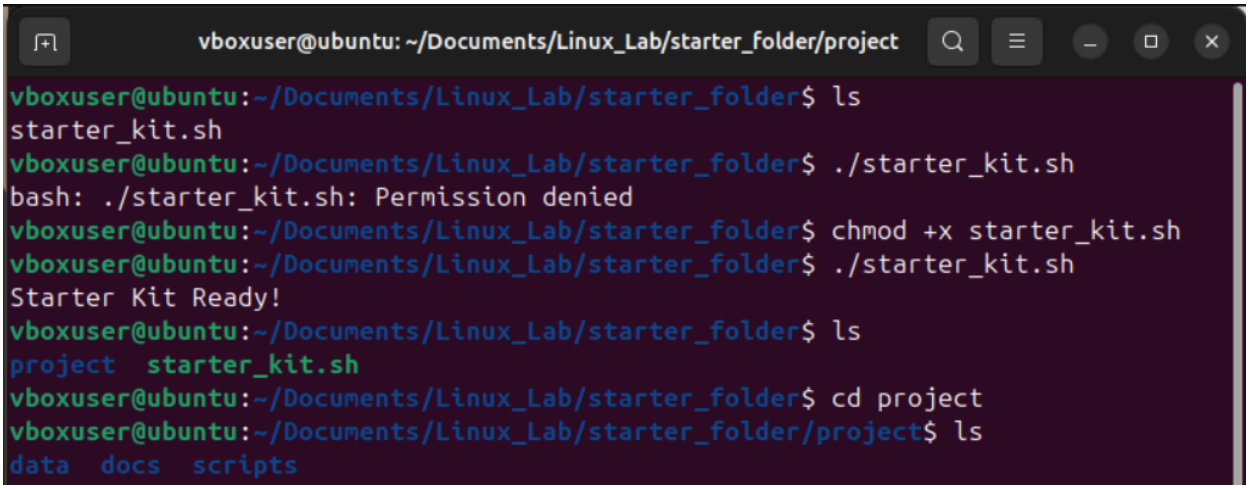
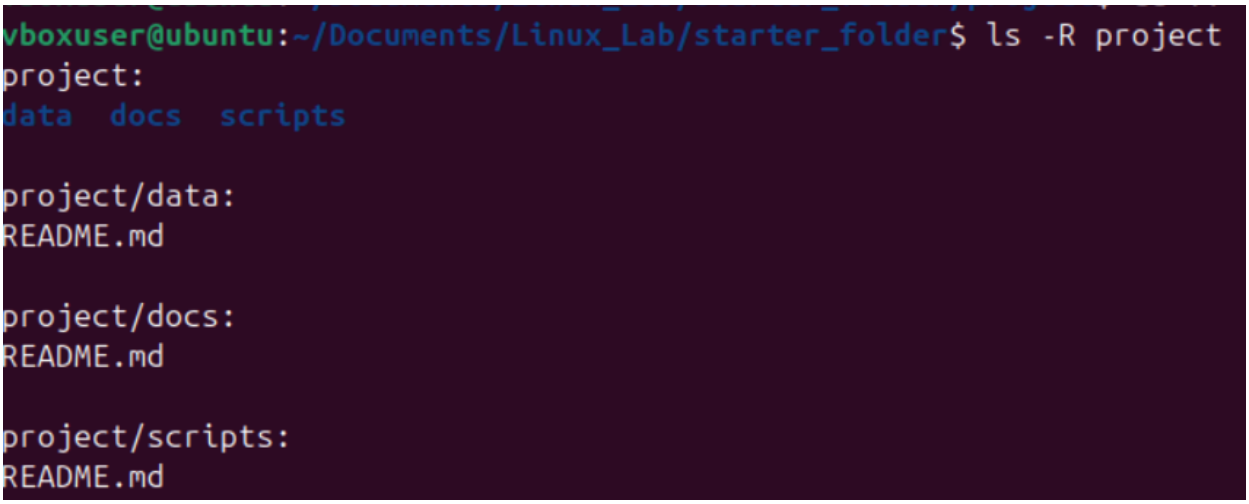
```
#  LAB 5 - Starter Kit & Automation

##  Objective
Automatically set up a starter project environment with organized folders a
```

````
---

## 🛠️ Purpose of `starter_kit.sh`

This script simplifies the setup of a new project by:
- Creating a standard folder structure: `scripts/`, `docs/`, `data/` inside
- Adding a `README.md` file in each folder to encourage documentation from
- Printing a confirmation message once setup is complete

---

##  Example Run

```bash
$ bash starter_kit.sh
Starter Kit Ready!
````

Directory Structure After Execution:

```
project/
├── scripts/
│   └── README.md
├── docs/
│   └── README.md
└── data/
    └── README.md
```

Screenshots:


```



❓ Extra Questions:

Q1. What does `mkdir -p` do?

- `mkdir -p` creates **nested directories** in one command.
- If the parent directory already exists, it **doesn't throw an error**.
- Example:

```
mkdir -p project/scripts
```

This creates both `project/` and `scripts/` if they don't exist.

Q2. Why is automation useful in DevOps?

- 🔁 **Consistency**: Ensures environments are set up the same way every time.
- ⚡ **Speed**: Saves time by eliminating manual setup.
- 📏 **Reproducibility**: Makes it easy to recreate environments for testing or deployment.
- 📦 **Scalability**: Supports large teams and CI/CD pipelines by automating repetitive tasks.

📎 Appendix: Raw Markdown Source

To ensure reproducibility and peer learning, the full Markdown source of this lab report is included below.

```
#  LAB 5 – Starter Kit & Automation
```

````
## 🎯 Objective
Automatically set up a starter project environment with organized folders a

## 🛠️ Purpose of `starter_kit.sh`

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## 🚀 Example Run

```bash
$ bash starter_kit.sh
Starter Kit Ready!
```

**Directory Structure After Execution:**
```
project/
├── scripts/
│   └── README.md
├── docs/
│   └── README.md
└── data/
    └── README.md
```

**Screenshots:**
*(Insert your screenshot here showing terminal output and folder tree)*

## Extra Questions

### Q1. What does `mkdir -p` do?

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- If the parent directory already exists, it **doesn't throw an error**.

### Q2. Why is automation useful in DevOps?

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- ⚡ **Speed**
- 🧪 **Reproducibility**
- 📦 **Scalability**
````