

## Week 6: Shell Scripting – Linux Automation

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#### Objective:

I Create a Bash script that automates folder backup by compressing it into a .tar.gz archive with a timestamp and moving it to a /backup directory.

#### Script Overview:

- Takes folder path as input
- Checks if the folder exists
- Creates a compressed tar.gz backup with current timestamp
- Stores the backup inside ~/backup
- Displays a success message

#### Script Code:

```
#!/bin/bash
```

```
read -p "Enter the full folder path to back up: " folder
```

```
if [ ! -d "$folder" ]; then
```

```
    echo " Folder not found!"
```

```
    exit 1
```

```
fi
```

```
mkdir -p ~/backup
```

```
timestamp=$(date +%Y%m%d_%H%M%S)
```

```
folder_name=$(basename "$folder")
```

```
backup_file="${folder_name}_${timestamp}.tar.gz"
```

```
tar -czf ~/backup/"$backup_file" "$folder"
```

```
echo "Backup created at: ~/backup/$backup_file"
```

**Test Folder Used:**

Path: /c/Users/ompra/test\_folder

**Files:**

- file1.txt

- file2.log

**Execution Steps:**

1. Created the script in bash shell using nano backup\_script.sh
2. Made it executable using: chmod +x backup\_script.sh
3. Ran the script: ./backup\_script.sh
4. Provided path: /c/Users/ompra/test\_folder
5. Verified backup file inside ~/backup
6. Verified archive contents using:

```
tar -tzf ~/backup/test_folder_*.tar.gz
```

**Outcome:**

Backup script executed successfully. Backup file was created and saved in the ~/backup directory with correct naming format and verified contents. All Week 6 objectives completed as required.