

# File Operations in Detail

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## 1. Creating Directories and Subdirectories

To organize files, you often need to create directories (folders) and subdirectories.

- **Command Line (Linux):**

```
mkdir project
mkdir project/src
```

## 2. Creating Files

You can create files using command line tools or programmatically.

- **Command Line:**
  - Linux/macOS: `touch project/src/file.txt`

## 3. Copying Files Between Directories

Copying files helps duplicate content or backup data.

- **Command Line (Linux):**

```
cp project-1/file.txt project-2/src/file.txt
```

## 4. Moving Files Using Relative Paths

Moving files transfers them from one location to another, possibly between sibling directories.

- **Directory Structure Example:**

```
parentDir/
├── dirA/
│   └── file.txt
└── dirB/
```

- **Command Line (Linux/macOS):**

```
mv parentDir/dirA/file.txt parentDir/dirB/
```

**Relative Path:**

When moving from `dirA` to sibling `dirB`, use `../dirB/` as the relative path from inside `dirA`.

- **Example:**

```
mv file.txt ../dirB/
```