

# Assignment - 2

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## ◆ Part 1: Concept (Read First)

### Absolute Path

- Starts from the **root directory** (/)
- Full path to a file or directory
- Same location, no matter where you are

**Example:**

```
/home/user/Documents/file.txt
```

### Relative Path

- Starts from the **current directory**
- Does **not** start with /
- Changes based on current location

**Example:**

```
Documents/file.txt
```

## Q1: Directory Setup

1. Go to your **home directory**.
2. Create a folder named `path_lab`.
3. Inside `path_lab`, create two directories:
  - `absolute`
  - `relative`
4. Inside `relative`, create a file named `test.txt`.

## Q2: Absolute Path Practice

1. From **any directory**, navigate to `path_lab` using an **absolute path**.
2. Move to the `relative` directory using an absolute path.
3. Display the content of `test.txt` using its absolute path.
4. Create a new file `abs.txt` inside the `absolute` directory using absolute path.

### Example Hint:

```
cd /home/username/path_lab/relative  
cat /home/username/path_lab/relative/test.txt
```

## Q3: Relative Path Practice

1. Go to `path_lab` directory.
2. Move to `relative` directory using **relative path**.
3. Go back to `path_lab` using `..`.
4. Create a file `rel.txt` inside `relative` using relative path.
5. Display `test.txt` without changing the current directory.

### Commands Hint:

```
cd relative  
cd ..  
cat relative/test.txt
```

## Q5: Navigation Using `.` and `..`

1. Stay inside `relative` directory.
2. Print the present working directory.
3. Use `.` to list files in current directory.
4. Use `..` to list files in parent directory.
5. Create a file in `absolute` directory while staying in `relative`.

### Commands Hint:

```
pwd  
ls .  
ls ..  
touch ../absolute/newfile.txt
```