

Problem Description:

You are tasked with writing a shell script that reads an input file and creates directories based on the contents. Each line in the file lists a course code along with the corresponding term. Your job is to organize these courses into directories according to the following rules. Before you begin, install the `tree` package to visualize the directory structure with this command: `sudo apt install tree`

Requirements:

Write a shell script that takes a file as input and creates directories based on the contents of the file. The script should:

- Accept a file as input. Show an error message if the file does not exist or is not provided.
- Creates a main directory named `Academic Materials`.
- Inside `Academic Materials`, creates directories for each term based on the course level and term number, following these rules:
 - The first digit of the course code represents the level (e.g., "CSE 314" is level 3).
 - The term is represented by "T-NUMBER", where NUMBER is either 1 or 2.
 - The folder for each term should be named LXTY, where X is the level and Y is the term number.
- If the course code is odd:
 - Create a directory inside the term folder named after the course code (e.g., `CSE 301`).
- If the course code is even:
 - Create a directory inside the term folder called `LABS`.
 - Inside `LABS`, create a directory for each even-numbered course (e.g., `CSE 314`).
- You should run the script like this: `./2005ccc.sh dirs.txt`. **You should check for the existence of the file and show an error message if it does not exist or is not provided.**

Example Input:

See the provided `dirs.txt` file.

Tips:

- Use `cut` to extract columns or fields. For example, `cut -d ' ' -f1` will extract the first field from each line, assuming that fields are separated by spaces. You can also extract multiple fields by specifying a range, like this: `cut -d ' ' -f1-3`.
- You can also use `cut` to extract characters from a string. For example, `cut -c1` will extract the first character of the provided string.
- Use `--help` or `man` to learn more about the commands you are using.
- `tree "Academic Materials"` will display the directory structure under `Academic Materials`.

Important: See the next page for the expected directory structure

Expected Directory Structure:

