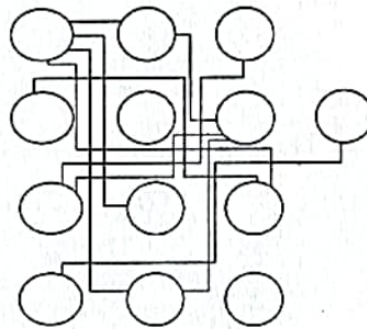
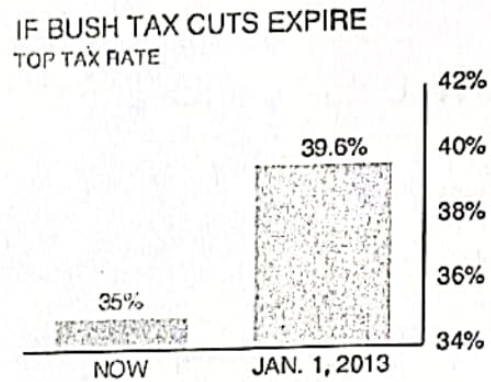
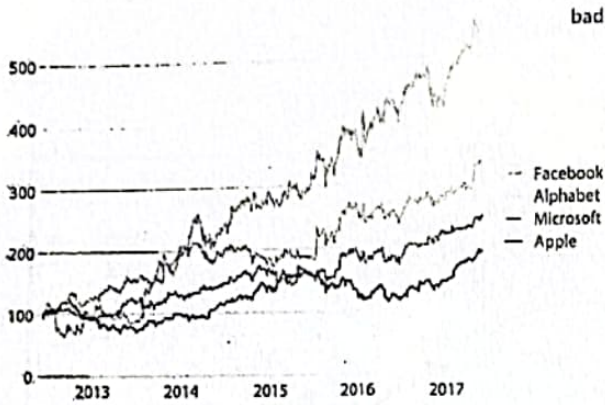


1. (30pts) List 03 main reasons for an interactive visualization? And describe an example for each.
2. (30pts) The following charts are not good. Analyze why they are not good and redesign them



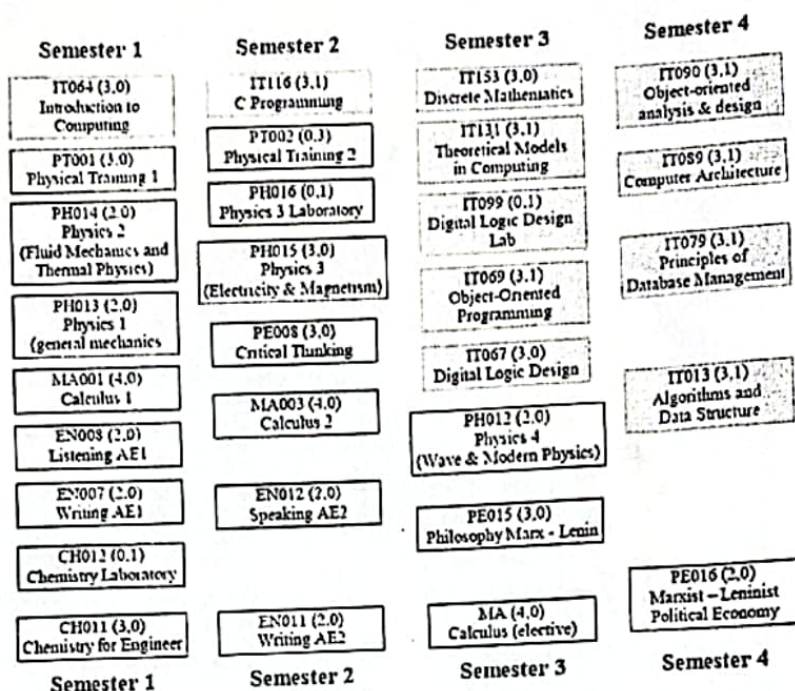
3. (40pts) Design a visualization

In a university, the curriculum of a program is updated each year such as

- Add new courses
- Remove existing courses
- Move a course from one semester to another
- Add a new connection between two courses
- Remove an existing connection between two courses

The update is to adopt new knowledge and technology, but people need to track the differences between versions.

- a. (20pts) Design a visualization to compare two versions of a curriculum WITHOUT connections between the courses



- b. (20pts) Design a visualization to compare two versions of a curriculum WITH connections between the courses

