## Lecture-2 Main Points

- Language of Propositional Logic.
  - Atomic propositions.
  - Connectives:  $\wedge, \rightarrow, \vee$  and  $\perp$ .
  - Derived connective:  $\neg A \equiv A \rightarrow \bot$ .
  - Formal rules for forming propositions.
- judgements:  $\Gamma \vdash A$
- Rules of inference help derive new judgements.
- Rules of inference for minimal logic
  - Axiom
  - Structural rules
    - \* Weakening
    - \* Contraction
  - Logical rules
    - \* For each connective there are two types. Introduction rule(s) and elimination rule(s).
- Example derivations.