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Propositional Logic

It is a sentential logic (or) statement logic that deals with their logical relationships.

Propositional logic is a statement that can be either true or false but not both.

It is represented using propositional variables, which are symbols or letters that denote specific statements.

i) Propositional Variables eg. P, q, r, S

ii) Logical Connectives. either it can be t or f

↓

And, Or, Not.

- i) Conjunction (\wedge) → connects 2 propositions
- ii) Disjunction (\vee) → at least 1 proposition true
- iii) Negation (\neg) → denying proposition
- iv) Implication (or) Conditional (\rightarrow) if-then
- v) Biconditional (\leftrightarrow) if & only if