Discrete Mathematics : Statements

Logic : A statement is a sentence that is true or false
Not Both!

"2 plus 3 equals 5" = True Statement
"4 is less than 3" = False Statement
"x plus 5 equals 6" = Not a Statement
↳ We don't know the value of 'x' so it may or may not be true, depending on the value of 'x'

Abstract from actual statements to symbols of statements
- p, q, r will represent arbitary statements
↳ Statement variables : Basic building blocks of Logic

Example

p = "Grass is green"
If p is true then:
p gets assigned a value T

p = "Snow is black"
If p is false then:
p gets assigned a value F

Truth - Table

p	¬p
T	F
F	T

Can build up complicated expressions using symbols

¬ : negation symbol (It means NOT)
¬p means 'not p'