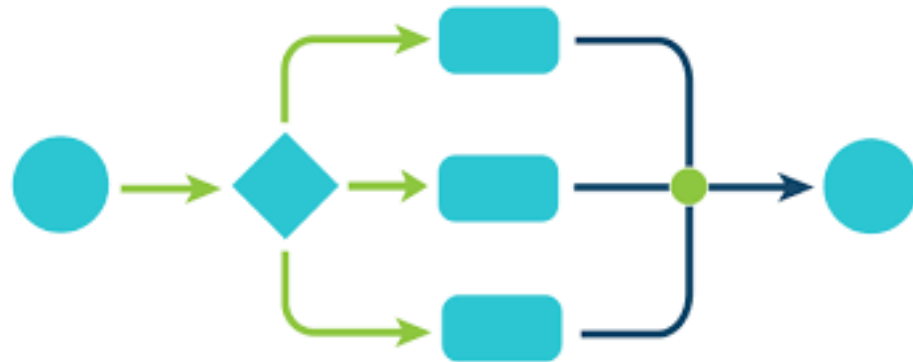


CODE COMPLEXITY TESTING



Cyclomatic Complexity

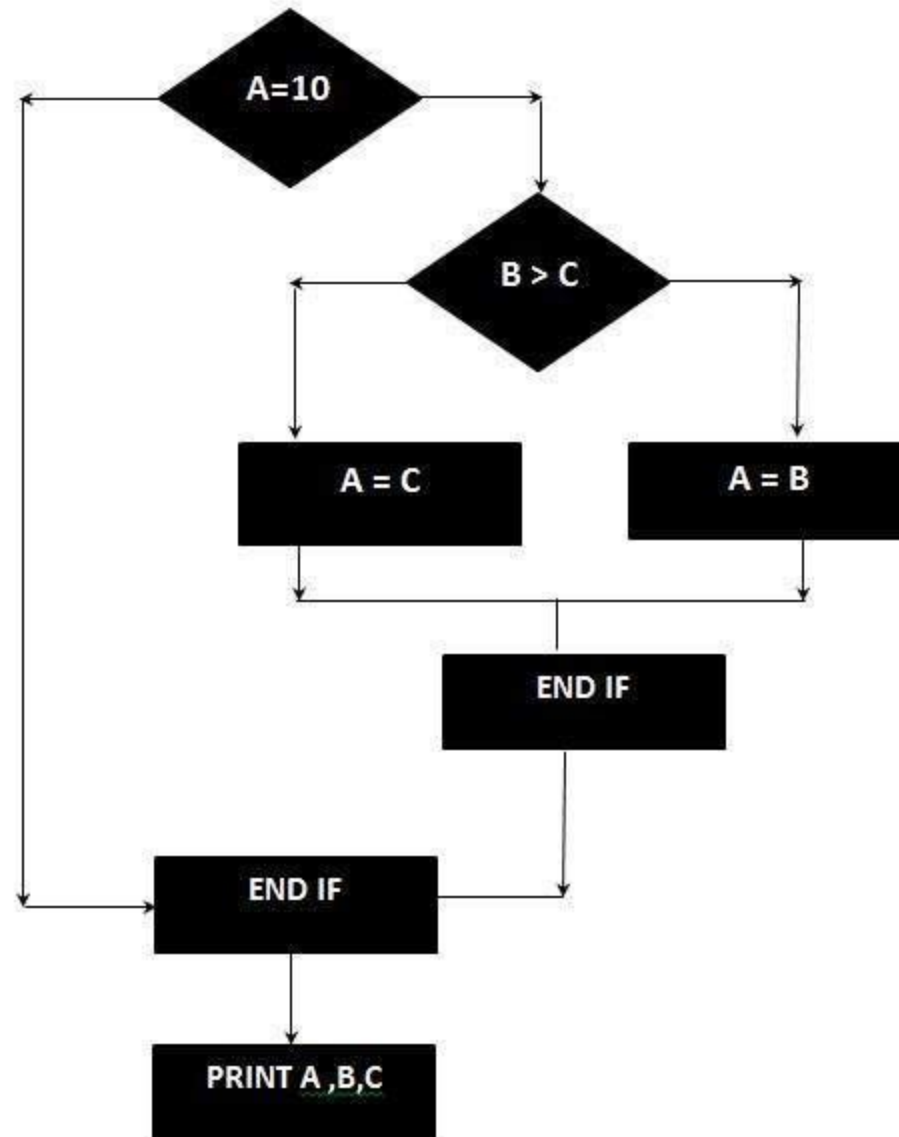
- ▶ Cyclomatic complexity = $E - N + P$
- ▶ where,
 - ▶ E = number of edges in the flow graph.
 - ▶ N = number of nodes in the flow graph.
 - ▶ P = number of nodes that have exit points





Example

- ▶ IF A = 10 THEN
- ▶ IF B > C THEN
- ▶ A = B
- ▶ ELSE
- ▶ A = C
- ▶ ENDIF
- ▶ ENDIF
- ▶ Print A
- ▶ Print B
- ▶ Print C



Evaluating Test Adequacy Criteria



Axioms/properties by Weyuker

- ▶ Applicability Property
- ▶ Nonexhaustive Applicability Property
- ▶ Monotonicity Property
- ▶ Inadequate Empty Set
- ▶ Anti extensionality Property
- ▶ General Multiple Change Property
- ▶ Anti decomposition Property
- ▶ Anticomposition Property
- ▶ Renaming Property
- ▶ Complexity Property
- ▶ Statement Coverage Property



Thank You