What is Path Testing?

Path Testing is a structural testing method based on the source code or algorithm and NOT based on the specifications. It can be applied at different levels of granularity.

Path Testing Assumptions:

- The Specifications are Accurate
- The Data is defined and accessed properly
- There are no defects that exist in the system other than those that affect control flow

Path Testing Techniques:

- **Control Flow Graph** \( CFG \) - The Program is converted into Flow graphs by representing the code into nodes, regions and edges.

- **Decision to Decision path** \( D \rightarrow D \) - The CFG can be broken into various Decision to Decision paths and then collapsed into individual nodes.

- **Independent basis paths** - Independent path is a path through a DD-path graph which cannot be reproduced from other paths by other methods.