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**DEPARTMENT: COMPUTER SCIENCES** 

**ASSIGNMENT: COMPARE AND CONTRAST BETWEEN HIERARCHICAL** 

**DATABASE AND NETWORK DATABASE** 

## **Contrast In Terms of:**

1. Data Structure

- (a) In a hierarchical database each Parent can have many children and each child can have just only one parent while In the Network database each Parent can have multiple children while each child can have multiple parent.
- 2. Data Manipulation
- (a) The algorithms of a hierarchical database can be retrieved Asymmetrically while the algorithms of a Network database can be retrieved Symmetrically.
- 3. Data Integrity
- (a) In a hierarchical database a child information cannot be inserted if it does not have a parent while the Network database does not suffer any insertion Anomaly.

## **Similarities**

- (a) In both databases, retrieving of algorithms is a complex process
- (b) Both databases have a one-to-one relationship

In Terms of	Hierarchical Database		Network Database
Data Structure	It is based on parent child relationship		A record can have many parent as well as many children
Data Manipulation	Not any Independent stand alone query Interface	CODASYL (Conference on data System Language)	