# ABSTRACT

Hamming Code is a linear block code. Here a Hamming (7,4) code is discussed for error correction and detection. Seven major source files are used to complete the job. 'Geninput' is for input purpose at the sender side. 'Hamfunc', 'Hamencod' and 'Hamdecod' triplets for encoding and decoding at sender and receiver side. 'Puterror' and 'Match' for error input during transmission time and matching the first input file & file after decoding repectively. All the six files use facility of 'Comfunc'.
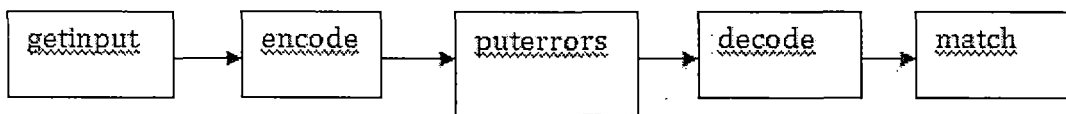
The idea is depicted in the above diagram.
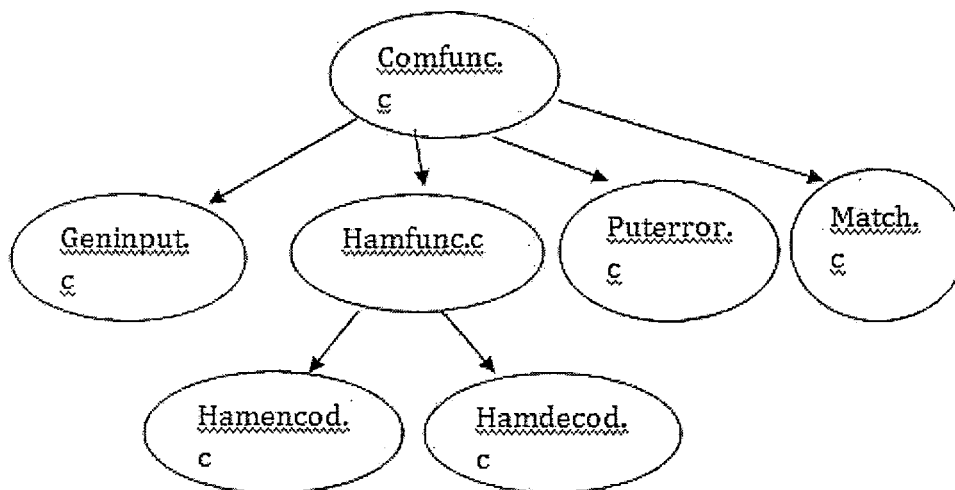
The dependencies among the files in a tree like structure.

In Puterror there is a provision for % of error. If it is 0, there is no error and no mismatch. Otherwise, Hamming Code detects single bit and multiple(2) bits errors and can correct single bit errors. By varying the % we can observe the variations in the number of detection and correction.

In future other coding techniques will be discussed and efficiencies among them will be compared.

Keywords:-Error detection ,correction, Hamming Code