

KONSTRUKSI *LEXICOGRAPHIC* UNTUK MEMBANGUN KODE HAMMING (7, 4, 3)

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Abstract. Hamming code can correct single error in messages transmission. Hamming codes can be constructed by Lexicographic codes. Lexicographic construction is a greedy algorithm that produces error correcting codes known as lexicographic codes. There are two ways to construct lexicographic codes. They are greedy construction and lexicographic constructions. Given codes with minimum distance d and length n . To construct the greedy algorithm, the codeword with length n are processed in some fixed order, and the next codeword is inserted in the code when its distance from all codewords previously selected is $\geq d$. The Lexicographic Construction is a different approach with a goal to speed up the process of generating lexicodes by storing the reusable information in the memory.

Keyword : linear codes, lexicographic codes, coset, generator matrix