ENCODER CRC 32 APPLICATION USING DIRECT CALCULATION ALGORITHM

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ABSTRAK

Shipping information in the telecommunications world is often a mistake is made on the data sent. The error caused a disturbance at the physical level of interference on the transmission line media, such as electromagnetic radiation interference, cross talking, lightning or because of interference noise. This interference causes the information which received does not match with the submitted information. CRC is one method that can be used to detect errors in the system. CRC is basically using mathematical calculations on a number called the checksum (CRC value is also called), which was based on the bits total to be transmitted. Based on these bits total there are several CRC types that are CRC 8, CRC 16, CRC 32 and CRC 64. To facilitate the process of calculating the CRC value, then was made a step or algorithm that can be implemented in the software (programming language). In this research created an algorithm that uses 32 CRC, and implementing them into the Java programming language in the GUI (Graphic User Interface) form.