Cyclic Redundancy Check

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1 Project Specifications

1.1 Description

The cyclic redundancy check (CRC) is a technique used to detect errors in digital data. CRC is a hash function that detects accidental changes to raw computer data commonly used in digital telecommunications networks and storage devices such as hard disk drives.

1.2 Working

In the cyclic redundancy check, a fixed number of check bits, often called a checksum, are appended to the message that needs to be transmitted. The data receivers receive the data and inspect the check bits for any errors. Mathematically, data receivers check on the check value attached by finding the remainder of the polynomial division of the contents transmitted. If it seems that an error has occurred, a negative acknowledgement is transmitted asking for data retransmission.

This project is made available in the cpp language.You just need a cpp compiler for the execution of the provided code.For better understanding of the project you need to have some basic knowledge of the CRC technique for error detection and correction.You can go through the following references.

1.3 References

https://www.geeksforgeeks.org/computer-network-hamming-code/

1.4 Project Guide

Iqra Altaf Gilani