# CS 305 Module Five Coding Assignment Checksum Verification Template

## Instructions

Using the instructions from theModule Five Coding Assignment Checksum Verification Guidelines and Rubric, replace the bracketed text with the relevant information in your own words.

## Algorithm Cipher

The algorithm cipher in use is the SHA-2 (SHA-256).

## Justification

This algorithm has a significantly lower chance of collision compared to SHA-1 and MD5. Both the SHA-1 and MD5 have had collisions found whereas SHA-2 has security against collision attacks and has had zero collisions found to date. This algorithm generates a 256-bit output regardless of input size and is irreversible. This will provide authenticity of signature from users and data by creating a unique hash that can be verified by a Checksum.

## Generate Checksum

A screen shot of a computer program

Description automatically generated

## Verification

A screenshot of a computer

Description automatically generated