# 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

I would recommend the SHA-256 as the appropriate encryption algorithm cipher that gives low percentage of collision. It was developed by the US Government’s National Security Agency (NSA) and is commonly used in SSL certificates for websites, digital signatures, authentication and encryption protocols.

## Justification

In recommending SHA-256 is justifiable because of its effectiveness in its resistance to collision. For its cryptographic hash functions is impossible to discover two separate inputs with similar outcomes for hash algorithms like SHA-256 evident of its collision resistance capabilities. Another aspect is the security features wherein it is mostly employed in cryptographic applications and also with it having a 256-bit output gives a wide hash space to make it more secure and challenging for any attackers to penetrate. In terms of its performance, it offers an equilibrium with its speed and security.

## Generate Checksum

You’ll submit your refactored code to your instructor. Your instructor will review it and this document.

## Verification

Insert a screenshot below of the web browser with your unique information.

