# 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 SHA-256 (Secure Hash Algorithm 256 bit)

## Justification

This algorithm is recommended by the National Institute of Standards and Technology (NIST) for most hash requiring applications. SHA-256 is considered one of the strongest algorithms and is used by many.

SHA-256 always produces a 256-bit hash value that is large enough to make reversing the process from the hash value computationally infeasible. This algorithm will always produce the same hash value and is collision resistant to a high standard being that it is extremely unlikely that two inputs will produce the same value. A collision in hash values occurs when two different inputs are hashed into the same value. This algorithm is good for data integrity, password hashing, digital signatures, and other security protocols.

## Verification

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

A white background with black numbers

Description automatically generated