# 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

After inspecting the scenario and the possible options, I would suggest the SHA-256 algorithm because it has a low chance of collision.

## Justification

The SHA-256, or the Secure Hash Algorithm 256 bit, was created in 2001 by the SNA as a replacement and an upgrade to the SHA-1. It also is one of the most secure functions on the market because the algorithm has a 0.01% probability of having collusions, which are caused when an algorithm assigns the same value for different sets of tables. The SHA-256 outputs characters using lowercase letters and numbers 0-9, which then creates possibilities. This is why a collusion probability is so low.

## 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.

A screenshot of a computer

Description automatically generated