# 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

SHA-256

## Justification

Secure Hash Algorithm 256-bit (SHA-256) was selected as the recommended algorithm cipher.

* SHA-256 is designed to be highly collision-resistant, so it's difficult to locate two different inputs that produce the same hash value.
* SHA-256 is considered to be a secure cryptographic hash function, and it is not likely to be vulnerable to any practical attacks.
* SHA-256 is utilized and supported in numerous security applications and protocols.

## 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

1. **References**

National Institute of Standards and Technology (NIST). (2015, August). *Secure Hash Standard (SHS)* (FIPS PUB 180-4). National Institute of Standards and Technology.

<http://dx.doi.org/10.6028/NIST.FIPS.180-4>

Manico, J., & Detlefsen, A. (2015). Iron-Clad Java. McGraw Hill Computing.