# CWE Detail – CWE-1025

## Description

The code performs a comparison between two entities, but the comparison examines the wrong factors or characteristics of the entities, which can lead to incorrect results and resultant weaknesses.

## Extended Description

This can lead to incorrect results and resultant weaknesses. For example, the code might inadvertently compare references to objects, instead of the relevant contents of those objects, causing two "equal" objects to be considered unequal.

## Threat-Mapped Scoring

Score: 0.0

Priority: Unclassified

## Modes of Introduction

**•** Implementation: N/A

## Common Consequences

**•** Impact: Varies by Context — Notes:

## Potential Mitigations

**•** Testing: Thoroughly test the comparison scheme before deploying code into production. Perform positive testing as well as negative testing. (Effectiveness: N/A)

## Applicable Platforms

**•** None (Class: Not Language-Specific, Prevalence: Undetermined)

## Demonstrative Examples

**•** However, the if statement will not be executed as the strings are compared using the "==" operator. For Java objects, such as String objects, the "==" operator compares object references, not object values. While the two String objects above contain the same string values, they refer to different object references, so the System.out.println statement will not be executed. To compare object values, the previous code could be modified to use the equals method: