

# SAS Hardcoding Detection - Summary

## What Kind of Hardcoding Does This Script Detect?

This Python script scans SAS programs to find places where fixed values (like numbers, dates, dataset names, etc.) are directly written in the code. These are called 'hardcoded values' and are often discouraged in validated programming environments.

Here's what it detects:

### 1. Conditions with Fixed Values

Example: `if country = "US";` or `where age > 18;`

### 2. Hardcoded Dataset Names

Example: `set study123;` or `merge temp2023;`

### 3. Hardcoded Dates

Example: `if visit_date = '2023-10-15';`

### 4. Literal Strings in Code

Example: `put "Processing complete";`

### 5. SELECT/CASE Clauses with Hardcoded Values

Example: `select (gender); when ("M") output;`

### 6. Missing Macro Variable Usage

Example: `if study = "ABC123";` (should it be `&study?`)

Why this matters:

- Hardcoded values reduce reusability
- They introduce risk when study configurations change
- They may lead to inconsistent results if not parameterized

## **SAS Hardcoding Detection - Summary**

The script generates an Excel report summarizing all findings with severity levels and counts.

Use this tool to clean up your SAS code and ensure it's validation-ready!