

PMD report

Problems found

#	File	Line	Problem
1	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	4	All classes, interfaces, enums and annotations must belong to a named package
2	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	4	Class comments are required
3	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	5	All methods are static. Consider using a utility class instead. Alternatively, you could add a private constructor or make the class abstract to silence this warning.
4	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	6	Parameter 'args' is not assigned and could be declared final
5	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	6	Public method and constructor comments are required
6	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	9	Local variable 'value' could be declared final
7	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	10	System.out.println is used
8	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	13	Public method and constructor comments are required
9	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING 2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	15	Avoid unused local variables such as 'weight'.
10	D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING	15	Local variable 'weight' could be declared final

2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java

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11 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 16 [Avoid unused local variables
such as 'length'.](#)

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12 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 16 [Local variable 'length' could be
declared final](#)

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13 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 19 [Parameter 'length' is not assigned
and could be declared final](#)

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ALL\SEMESTERS COURSES CONTENT\SPRING

14 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 19 [Parameter 'product' is not
assigned and could be declared
final](#)

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15 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 19 [Parameter 'weight' is not assigned
and could be declared final](#)

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16 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 19 [Public method and constructor
comments are required](#)

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17 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 21 [Found 'DD'-anomaly for variable
'cost' \(lines '21'-'26'\).](#)

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18 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 21 [Found 'DD'-anomaly for variable
'cost' \(lines '21'-'30'\).](#)

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19 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 21 [The initializer for variable 'cost'
is never used \(overwritten on
lines 26 and 30\).](#)

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20 2023\CSE 565 Software Verification Validation and
Testing\ASSIGNMENTS\Assignment 4 - Decision Code
Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java 22 [Found 'DD'-anomaly for variable
'output' \(lines '22'-'34'\).](#)

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21	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	22 Found 'DD'-anomaly for variable 'output' (lines '22'-'36').
D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING		
22	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	22 The initializer for variable 'output' is never used (overwritten on lines 34 and 36).
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23	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	24 Avoid using Literals in Conditional Statements
D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING		
24	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	24 Use equals() to compare object references.
D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING		
25	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	24 Use equals() to compare strings instead of '==' or '!='
D:\ASU MS IN CS COURSE CONTENT AND ALL\SEMESTERS COURSES CONTENT\SPRING		
26	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	33 Avoid using Literals in Conditional Statements
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27	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	34 Avoid using if...else statements without curly braces
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28	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	34 This statement should have braces
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29	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	36 Avoid using if...else statements without curly braces
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30	2023\CSE 565 Software Verification Validation and Testing\ASSIGNMENTS\Assignment 4 - Decision Code Coverage\CSE 565 SVVT Assignment 4\src\StaticAnalysis.java	36 This statement should have braces