Report on Identified Refactoring Opportunities for (SC/ST) Refactoring

The tool identifies the Control-Fields and conditional constructs (Switch/If) that use these Control-Fields to simulate the (SC / ST) refactoring. It prioritizes the Control-Fields (refactoring opportunities) based on the following criteria:

1. Number of conditional constructs that switch on Control-Field
   Group i represents i different conditional constructs where the Control-Field is used
2. Average size of the conditional body
3. Number of control values
   2-3 control values
   3-6 control values
   6-n control values
4. Presence of conditional constructs with respect to the class of declaration (COD) of Control-Field
   In COD (A)
   Outside (B)
   Mixed (C)
5. Qualified for SC or ST
6. Static Field
7. Have subclasses already

Input Benchmark Statistics:

No. Of Classes: 325

No. Of Primitive Felds: 433

No. Of Control-Fields for Subclass Pattern: 3

No. Of Control-Fields for State pattern: 2

Total No. Of Control-Fields: 5

Uses	Replace Type Code with Subclass (SC)	
8	<math.geom2d.conic.Circle2D, direct>	(A)
2	<math.geom2d.conic.Parabola2D, debug>	(A)
	<math.geom2d.conic.HyperbolaBranch2D, positive>	(A)

Uses	Replace Type Code with State (ST)	
9	<math.geom2d.conic.Ellipse2D, direct>	(C)
2	<math.geom2d.curve.PolyCurve2D, closed>	(A)

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