

## Program Analysis (CSE-503)

### Assignment 1

Date: 25-Aug-19

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Soot is a static analysis framework that allows you to analyze, instrument, optimize and visualize Java applications. Using Soot framework answer the following questions about a given Java program:

1. Names of all the classes in an application.
2. Names of all the methods in a class.
3. Print all data members of a class.
4. Type of the arguments of methods.
5. Locate loops in the program.
6. Identify return statements and their return types.
7. Method calls with arguments.
8. Identify the local variables that were defined in every method.
9. **For every call, identify if the called method was user defined - (Bonus marks)**
10. **For every located loop guess whether it's a *For* loop or *While* loop or *Do-While* loop. - (Bonus marks)**