**Software Engineering Tools Lab**

**Assignment No-7**

(Module 5- Source code testing using tools) **Due date-04/05/2022**

Q 1. What is Source code analysis? What is its importance?

Q 2. Below are the some important open source tools used in testing the source code, provide the information of below tools with respect to

1. Owner/ developer
2. Developed in which language
3. Brief information/introduction
4. Language support (applicable for source code written in language)
5. Advantages
6. Disadvantages

**Source code analysis tools-**

### VisualCodeGrepper

### Rips

### Brakeman

### Flawfinder

### Bandit

Q 3. Perform source code testing using **Flawfinder** for the code written in ‘c’ and ‘cpp’ language given below

Link- https://github.com/sidp1991/SETAssignment

Note-use files program1.c and program2.cpp present on above link.

After performing analysis create a report which will contain below points

1. Number of hits
2. Potential risks
3. Suggested alternatives for these risks
4. Updating the code as per suggestions
5. Re-execution of code after updating the changes.

Q 4. Perform source code testing using **Bandit** for your code written in ‘python’ language (use your previous code) for any security flaws

After performing analysis create a report which will contain below points

1. Number of hits
2. Potential risks
3. Suggested alternatives for these risks
4. Updating the code as per suggestions
5. Re-execution of code after updating the changes.