Valgrind Memory Debugging Lab Manual

Introduction:

Valgrind is a powerful tool that helps developers detect memory management and threading bugs.

Objectives:

- Detect memory leaks, invalid memory access, use-after-free, and double-free errors.

- Understand Valgrind's output messages.

- Practice fixing memory issues in both C and C++.

Instructions:

1. Compile programs: make

2. Run under Valgrind: make PROGRAM=bad_access valgrind-c

3. Fix memory bugs.

4. Re-validate with Valgrind.

Learning Outcomes:

- Detect and fix common C/C++ memory issues.

- Understand Valgrind analysis reports.