

Programming Fundamentals – Spring 2013  
(BS-SE-F12 Morning & Afternoon)

**Lab # 11**

**Instructions:**

- Indent your code properly.
- Use meaningful variable and function names. Follow the naming conventions.
- Use meaningful prompt lines/labels for all input/output that is done by your programs.
- Make sure that there are no **dangling pointers** or **memory leaks** in your program.

**Task # 1**

Write a C++ program for solving **Programming Challenge # 1** (Chapter 9) on Page 537 of your textbook.

**Task # 2**

Write a C++ program for solving **Programming Challenge # 5** (Chapter 9) on Page 538 of your textbook.

**Task # 3**

Write a C++ program for solving **Programming Challenge # 11** (Chapter 9) on Page 539 of your textbook.

**Task # 4**

Write a C++ program for solving **Programming Challenge # 9** (Chapter 9) on Page 538-539 of your textbook.

**Task # 5**

Write a C++ program for solving **Programming Challenge # 10** (Chapter 9) on Page 539 of your textbook.

**Task # 6**

Write a C++ program for solving **Programming Challenge # 8** (Chapter 9) on Page 538 of your textbook.

**Task # 7**

Write a C++ program for solving **Programming Challenge # 12** (Chapter 9) on Page 539 of your textbook.

**Task # 8**

Write a C++ program for solving **Programming Challenge # 13** (Chapter 9) on Page 539 of your textbook.

**Task # 9**

Write a C++ program for solving **Programming Challenge # 14** (Chapter 9) on Page 539 of your textbook.