CSI 32   **Introduction to Computer Programming II**
                              Final Exam Study guide

Textbook: Programming: Principles and Practice Using C++

Chapter 2: Hello, World!
1. Review *compilation* and *linking*
2. Review the terminology in Terms
3. Be ready to answer the questions: 2 – 10 from the Review
4. Review quiz 1
5. Review all examples that were shown

Chapter 3: Objects, Types , and Values
1. Review the HW assignment programming exercises for grade and for practice: 4, 6, 7, 8, 9, 20
2. Review the terminology in Terms
3. Be ready to answer the questions 1-12, 14-22 from the Review
4. Review quiz 1
5. Review all examples that were shown and all in-class work

Chapter 4: Computation
1. Review the HW assignment programming exercises for grade and for practice: 4, 5, 8, 9, 10, 19-21
2. Review the terminology in Terms
   (except for **lvalue** and **rvalue** – we didn't pay enough attention to them)
3. Be ready to answer the questions 1, 2, 4, 5, 7, 8, 11, 13-18, 20-29
4. Review quiz 2
5. Review all examples that were shown and all in-class work

Chapter 5: Errors
1. Be ready to answer the questions 1-3, 6-10, 12, 13, 15-17, 21, 22 from the Review
2. Review the terminology in Terms
3. Review all examples that were shown and all in-class work
4. Review the HW assignment programming exercises for grade and for practice: 2, 3, 4, 5, 8
5. It is also recommended to look at programming exercises 7, 9 and 10 and be ready to work on a similar problem on a final exam
6. Review quiz 3

Chapter 8: Technicalities: Functions, etc.
1. Be ready to answer the questions 1-3, 6-10, 12, 13, 15-17, 21, 22 from the Review
2. Review the terminology in Terms (except for *forward declaration*)
3. Review all examples from our meetings and all in-class work
4. Review the HW assignment programming exercises for grade and for practice:
    2 (from quiz), 3 (used in Midterm Exam), 4, 5, 9, 11 (in-class work), 13
5. Review quiz 4

Chapter 9: Technicalities: Classes, etc.
1. Be ready to answer the questions 1, 2, 5-10 from the Review
2. Review the terminology in Terms
3. Review all examples from our meetings and all in-class work
4. Review the HW assignment programming exercises for grade and for practice:
   2(in-class work), 5, 6, 7, 9, 10, 13
5. Review quiz 5

Chapter 10: Input and Output Streams
1. Be ready to answer the questions 1-13, and 15 from the Review
2. Review the terminology in Terms
3. Review all examples from our meetings and all in-class work
4. Review the HW assignment programming exercises for grade and for practice:
   1-4, 9 (in-class work), 11
5. Review quiz 6

Chapter 17: Vector and Free Store
1. Be ready to answer the questions 1-13, 15-19 from the Review
2. Review the terminology in Terms
3. Review all examples from our meetings and all in-class work
4. Review the HW assignment programming exercises for grade and for practice:
   6 – 8, and the HW assignment given separately
5. Review quiz 7

Chapter 18: Vector and Arrays
1. Be ready to answer the questions 2-17 from the Review
2. Review the terminology in Terms
3. Review all examples from our meetings and all in-class work
4. Review the HW assignment
5. Review quiz 8

Chapter 19: Vector, Templates, and Exceptions
1. Do the Drill, 1 – 14 (all steps)
2. Be ready to answer the questions 1-15, and 17-20 from the Review
3. Review the terminology in Terms
4. Review all examples from our meetings and all in-class work
5. Review the HW assignment and exercises for practice: 1, 2, 10, and 12

Chapter 20: Containers and Iterators
1. Review our lecture slides
2. Make sure to review all the examples and in-class practice
3. Work on the suggested homework assignment and the items suggested for practice

Chapter 21: Algorithms and Maps
1. Review our lecture slides
2. Make sure to review all the examples and in-class practice

Classes: inheritance, polymorphism, hierarchies, etc.
1. Review our lecture slides
2. Make sure to review all the examples and in-class practice
3. work on the suggested practice
4. Work on the virtual functions example

Recursion with C++
1. Review our lecture slides
2. Make sure to review all the examples and in-class practice
3. work on the suggested practice