weekly-Exercise - 01

## ICS 365-51 Metropolitan State University/MN

## Week 1 Due 11:59pm, Sunday, Aug. 28, 2022 Fall 2022

## Name:\_\_\_\_\_\_\_\_\_\_\_\_Pong Lee \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Score: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Please complete both Parts I and II and then upload the results to D2L under the dropbox for Weekly Exercise 01 before the deadline (total 20 points).

## Part I: Based on the discussion in Lecture 1 and Chapter 1, please either bold or highlight your answers below, only one answer per question. (1 point each, total 10 points)

1. Based on the discussion on “compilation process,” “syntax analysis” is defined as to

A) generate machine code

B) convert characters in the source program into lexical units

C) generate intermediate code

D) transform lexical units into parse trees which represent the syntactic structure of program

2. Which of the following category of the programming languages does Python belong to?

A) Markup

B) Logic

C) Imperative

D) Functional

3. Based on the discussion on Programming Language Evaluation Criteria in Chapter 1, "support for abstraction" refers to

A) A relatively small set of primitive constructs can be combined in a relatively small number of ways

B) The ability to define and use complex structures or operations in ways that allow details to be ignored

C) Presence of two or more distinct referencing methods for the same memory location

D) Few constructs, a small number of primitives, a small set of rules for combining them

4. In Java, a user can increment a simple integer variable in each of the following ways except

A) count++

B) ++count

C) count = count + 1

D) count =+ 1

5. Which of the following is not considered as one of the characteristics of von Neumann computers?

A) Instructions and data are piped from memory to CPU

B) Data and programs stored in memory

C) Multiple CPUs and parallel processing

D) Memory is separate from CPU

6. Based on the discussion in Chapter 1, which of the following statements is incorrect for Just-in-Time (JIT) implementation systems?

A) The intermediate language of a subprogram is compiled and translated to machine code whenever the subprogram is called. In other words, the machine code of a subprogram is not kept for subsequent calls;

B) JIT systems are widely used for Java programs;

C) The source programs are initially translated into an intermediate language;

D) In essence, JIT systems are delayed compilers.

7. Which of the following programming languages has been mainly used for business applications?

A) Prolog

B) LISP

C) Fortran

D) COBOL

8. All the following are most important criteria for evaluating programming languages except

A) Writability

B) Tangibility

C) Readability

D) Reliability

9. Based on Figure 1.3 on page 24 of your textbook, which of the following functions does not work with “symbol table” in the compilation process?

A) Intermediate code generator and semantic analyzer B) Lexical analyzerC) Syntax analyzerD) Optimization

10. Which of the following statements is not true?

A) The connection speed between CPUs is the bottleneck of von Neumann computers

B) The major methods of implementing programming languages are: compilation, pure interpretation, and hybrid implementation

C) Program instructions often can be executed much faster than the speed of the connection

D) Major influences on language design have been machine architecture and software development methodologies

**Part II: Please study the handouts and follow the steps provided in the handouts to complete the following tasks: (Total 10 points)**

1. Please provide the screenshot that shows that you have changed your password on our Linux server properly: (please replace the example shown below with yours, 3 points)

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2. Please provide the screenshot that shows you have successfully created your homepage on our Linux server properly. (please replace the example shown below with yours, 3 points)

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3. Please add two more links for learning Linux and Shell Programming to the web page shown above and provide the screenshot similar to the one provided below. You need to use a proper title to replace either “My first selection” or “My second selection” on your updated page: (please replace the example shown below with yours, 4 points)

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