CENTENNIAL COLLEGE

LAB 1

COMP-217 SEC- 001

Name: Muhammad Saad Student Id: 301077320

Instructions:

* This assignment is supposed to be completed individually.
* Add you name and student Id on top of the Lab 1 Doc.
* Please add correct answer under answer section for each question.
* Submit the file with correct responses in the submission box (LAB 1) under Assignments section.
* Each question has 1 mark each.
* Please pick up the answers as a/b/c/d from options (do not add complete text).
* Please add the answers sequentially as per the questions by editing this file.
* For submission name the file with following convention : **studentfirstname\_lastname\_lab1**

**Q1:** Which of the following statements is *false*?

a. Object-oriented programming is today's key programming methodology.

b. C++ is one of today's most popular software development languages.

c. Software commands computer hardware to perform tasks.

d. In use today are more than a trillion general-purpose computers and trillions more cellphones, smartphones and other handheld devices.

**ANS: C**

**Q2:** Which of the following statements is *false*?

a. Object-oriented programming is today's key programming methodology.

b. C++ is standardized worldwide through the International Organization for Standardization.

c. Hardware controls software.

d. There are now more mobile devices than people in the world.

**ANS: C**

**Q3:** Which of the following statements is *false*?

a. Cloud computing allows you to use software, hardware and information stored on remote computers via the Internet and available on demand—rather than having it stored on your personal computer.

b. electronic health records enable health care providers to share patients’ information across a secure network, improving patient care, reducing the probability of error and increasing overall efficiency of the health care system.

c. Global Positioning System (GPS) devices a single satellite to retrieve location-based information.

d. The Human Genome Project was founded to identify and analyze the 20,000+ genes in human DNA.

**ANS: C**

**Q4:** Which of the following statements is *false*?

a. Cloud computing allows you to use software, hardware and information stored in the “cloud”—i.e., accessed on remote computers via the Internet and available on demand—rather than having it stored on your personal computer.

b. Cloud computing services allow you to increase or decrease resources to meet your needs at any given time, so they can be more cost effective than purchasing expensive hardware to ensure that you have enough storage and processing power to meet your needs at their peak levels.

c. Businesses using cloud computing services must still manage the applications, which can be costly.

d. Both (a) and (c).

**ANS: D**

**Q5:** Which of the following is most closely associated with Moore's Law?

a. Every year or two, the price of computers has approximately doubled.

b. Object-oriented programming uses less memory than previous software-development methodologies.

c. Demand for communications bandwidth is decreasing dramatically each year.

d. Every year or two, the capacities of computers have approximately doubled without any increase in price.

**ANS: D**

**Q6:** Which of the following is *not* one of the six logical units of a computer?

a. Input unit.

b. Output unit.

c. Central processing unit.

d. Printer.

**ANS: D**

**Q7:** Which of the following statements is *false*?

a. Speaking to your computer is a form of input.

b. Playing a video is an example of output.

c. A multi-core processor implements several processors on a single integrated-circuit chip.

d. Information in the memory unit is *persistent*—it is retained when the computer's power is turned off.

**ANS: D**

**Q8:** Which of the following statements is *false*?

a. The impressive functions performed by computers involve only the simplest manipulations of 1s and 2s.

b. ASCII is a popular subset of Unicode.

c. Fields are composed of characters or bytes.

d. On some operating systems, a file is viewed simply as a sequence of bytes.

**ANS: B**

**Q9:** Which of the following data items are arranged from the smallest to the largest in the data hierarchy.

a. records, characters, fields, bits, files.

b. bits, files, fields, records, characters.

c. fields, characters, bits, files, records.

d. bits, characters, fields, records, files.

**ANS: D**

**Q10:** Which of the following is *not* one of the three general types of computer languages?

a. Machine languages.

b. Assembly languages.

c. High-Level languages.

d. Spoken languages.

**ANS: D**

**Q11:** Which of the following statements is *true*?

a. Interpreted programs run faster than compiled programs.

b. Compilers translate high-level language programs into machine language programs.

c. Interpreter programs typically use machine language as input.

d. None of the above.

**ANS: B**

**Q12:** Which of the following statements about the C programming language is *false*?

a. C was implemented in 1972 by Dennis Ritchie at Bell Laboratories.

b. With careful design, it’s possible to write C programs that are portable to most computers.

c. C initially became widely known as the Windows operating system’s development language.

d. Today, most of the code for general-purpose operating systems is written in C or C++.

**ANS: C**

**Q13:** C++ provides a number of features that “spruce up” the C language, but more importantly, it provides capabilities for \_\_\_\_\_\_\_\_ that were inspired by the Simula simulation programming language.

a. structured programming

b. simulation

c. object-oriented programming

d. None of the above.

**ANS: C**

**Q14:** Today, virtually all new major operating systems are written in:

a. Objective-C.

b. C or C++.

c. Visual C#.

d. Ada.

**ANS: B**

**Q15:** Which of the following languages is used primarily for scientific and engineering applications?

a. Fortran.

b. COBOL.

c. Pascal.

d. Basic.

**ANS: A**

**Q16:** Which language was developed by Microsoft in the early 1990s to simplify the development of Windows applications?

a. Visual C#.

b. Python.

c. Objective-C.

d. Visual Basic.

**ANS: D**

**Q17**: \_\_\_\_\_\_\_\_ is a graphical language that allows people who design software systems to use an industry stan­dard notation to represent them.

a. The Unified Graphical Language

b. The Unified Design Language

c. The Unified Modeling Language

d. None of the above

**ANS: C**

**Q18:** \_\_\_\_\_\_\_\_ models software in terms similar to those that people use to describe real-world objects.

a. Object-oriented programming

b. Object-oriented design

c. Procedural programming

d. None of the above

**ANS: B**

**Q19:** Which statement is *false*?

a. Classes are reusable software components.

b. A class is to an object as a blueprint is to a house.

c. Performing a task in a program requires a method.

d. A class is an instance of its object.

**ANS:D**

**Q20:** The creates object code and stores it on disk.

a. Interpreter.

b. Compiler.

c. Preprocessor.

d. Loader.

**ANS: B**

**Q21:** The linker links:

a. The source code with the object code.

b. The object code with the libraries.

c. The executable code with primary memory.

d. The primary memory with the CPU.

**ANS: B**

**Q22** Which of the following statements is *false*?

a. The concepts of icons, menus and windows were originally developed by Xerox PARC.

b. Windows is an open source operating system.

c. The software that contains the core components of the operating system is called the kernel.

d. Linux source code is available to the public for examination and modification.

**Ans: B**

**Q23:** Which of the following is *not* a key organization in the open-source community?

a. Apache.

b. Source Forge.

c. Firefox.

d. Eclipse.

**ANS: C**

**Q24:** \_\_\_\_\_\_\_\_ helps Internet-based applications perform like desktop applications.

a. Ajax

b. Blogging

c. RSS

d. Mashups

**ANS: A**

**Q25:** \_\_\_\_\_\_\_\_ is a communications protocol used to send information over the web.

a. Hypertext Markup Language (HTML).

b. URL (Uniform Resource Locator).

c. Web 2.0

d. TCP/IP

**ANS: D**

**Q26:** \_\_\_\_\_\_\_\_ involves reworking programs to make them clearer and easier to maintain while preserving their correctness and functionality.

a. Object-oriented programming

b. Refactoring

c. Agile software development

d. LAMP

**ANS: B**

**Q27:** Which software product release category is "generally feature complete and supposedly bug free, and ready for use by the community?"

a. Alpha.

b. Beta.

c. Release candidate.

d. Continuous beta.

**ANS: C**

Q28: Which of the following is *not* a goal stated by the creator of C++ for the new C++ standard?

a. Make C++ easier to learn.

b. Improve library building capabilities.

c. Make C++ an open source programming language.

d. Increase compatibility with the C programming language.

**ANS: C**

**Q29** [C++14]: Which of the statements a), b) and c) about C++14 is *false*?

a. It added several language features.

b. It added several C++ Standard Library Enhancements.

c. It added several bugs from C++11.

d. None of the above statements is false.

**ANS: C**

**Q30** Which of the following statements about the Boost Libraries is *false*?

a. They are free.

b. They are open source.

c. They are peer reviewed and portable.

d. They are automatically included in the latest C++ Standard Library.

**ANS: D**

**Q31** [C++11]: The Boost Libraries \_\_\_\_\_\_\_\_ pointers help you avoid some key errors associated with traditional pointers.

a. open

b. regular

c. smart

d. self-correcting

**ANS: C**

**Q32** Which of the following statements about regular expressions is *true*?

a. They are used to match specific character patterns in text.

b. They can be used to replace parts of one string with another, or to split a string.

c. They can be used to validate data to ensure that it’s in a particular format.

d. All of the above statements are true.

**ANS: D**

**Q33** Which of the following statements about regular expressions is *true*?

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d. All of the above statements are true.

**ANS: D**

**Q34:** End-of-line comments that should be ignored by the compiler are denoted using:

a. Two forward slashes (//).

b. Three forward slashes (///).

c. A slash and a star (/\*).

d. A slash and two stars (/\*\*).

**ANS: A**

**Q35:** Which of the following does *not* cause a syntax error to be reported by the C++ compiler?

a. Mismatched {}.

b. Missing \*/ in a comment.

c. Missing ; at the end of a statement.

d. Extra blank lines.

**ANS: D**

**Q36:** Which of the following is *not* a syntax error?

a. std::cout << 'Hello world! ';

b. std::cout << "Hello   
 world! ";

c. std::cout << "Hello world! ";

d. std::cout << Hello world!;

**ANS: C**

**Q37:** Which of the following statements would display the phrase C++ is fun?

a. std::cout << "Thisis fun\rC++ ";

b. std::cout << '++ is fun';

c. std::cout << "\"C++ is fun\"";

d. std::cout << C++ is fun;

**ANS: C**

**Q38:** Which of the following is *not* a valid C++ identifier?

a. my Value

b. \_AAA1

c. width

d. m\_x

**ANS: A**

**Q39:** Which is the output of the following statements?

std::cout << "Hello ";

std::cout << "World";

a. Hello World

b. World Hello

c. Hello

World

d. World

Hello

**ANS: A**

**Q40:** Which of the following is the escape character?

a. \*

b. \

c. \n

d. "

ANS:B

**Q41:** Which of the following code segments prints a single line containing hello there with the words separated by a single space?

a. std::cout << "hello ";

std::cout << " there";

b. std::cout << "hello" , " there";

c. std::cout << "hello";

std::cout << "there";

d. std::cout << "hello";

std::cout << " there";

**ANS: A**

**Q42:** Which of the following is a variable declaration statement?

a. int total;

b. #include <iostream>

c. int main()

d. // first string entered by user

**ANS: A**

**Q43:** The \_\_\_\_\_\_\_\_ object enables a program to read data from the user.

a. std::cout.

b. std::cin.

c. std::cread.

d. std::cget.

**ANS: B**

**Q44:** The assignment operator \_\_\_\_\_\_\_\_ assigns the value of the expression on its right to the variable on its left.

a. <-

b. ->

c. =

d. #

**ANS: C**

**Q45:** The std::endl stream manipulator\_\_\_\_\_\_\_\_.

a. inputs a newline.

b. flushes the output buffer.

c. outputs a newline and flushes the output buffer.

d. terminates the program.

**ANS: C**

**Q46:** Which of the following uses C++11's list initialization to initialize count to 0?

a. int count = 0;

b. int count[0];

c. int count(0);

d. int count{0};

**ANS: D**

**Q47:** Which of the following statements does *not* overwrite a preexisting value stored in a memory location?

a. int a;

b. number = 12;

c. y = y + 2;

d. width = length;

**ANS: A**

**Q48:** Which of the following statements could potentially change the value of number2?

a. std::cin >> number2;

b. sum = number1 + number2;

c. number1 = number2;

d. std::cout << number2;

**ANS: A**

**Q49:** What is the value of result after the following C++ statements execute?

int a{4};

int b{12};

int c{37};

int d{51};

int result{d % a \* c + a % b + a};

a. 119

b. 51

c. 127

d. 59

**ANS: A**

**Q50:** In what order would the following operators be evaluated

-**,** \***,** /**,** +**,** %

Assume that if two operations have the same precedence, the one listed first will be evaluated first.

a. +**,** -**,** /**,** \***,** %

b. -**,** +**,** %**,** \***,** /

c. -**,** \***,** %**,** +**,** /

d. \***,** /**,** %**,** -**,** +

**ANS: D**

**Q51:** Which of the following is *not* an arithmetic operator?

a. +

b. -

c. =

d. %

**ANS: C**

**Q52:** What will be the output after the following C++ statements have been executed?

int a{4};

int b{12};

int c{37};

int d{51};

if (a < b) {

cout << "a < b" << endl;  
}

if (a > b) {

cout << "a > b" << endl;  
 }

if (d <= c) {

cout << "d <= c" << endl;  
}

if (c != d) {

cout << "c != d" << endl;  
 }

a. a < b  
c != d

b. a < b  
d <= c   
c != d

c. a > b   
c != d

d. a < b  
c < d   
a != b

**ANS: A**

**Q53:** Which of the following is a compilation error?

a. Neglecting to declare a local variable in a function before it is used.

b. Using a triple equals sign instead of a double equals sign in the condition of an if statement.

c. Omitting the left and right parentheses for the condition of an if statement.

d. All of the above.

**ANS: A**

**Q54:** Each of the following is a relational or equality operator *except*:

a. <=

b. =!

c. ==

d. >

**ANS: B**

**Q55:** The escape sequence for a newline is:

a. \n

b. \t

c. \r

d. \a

**ANS:A**