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| Instructor | **Professor Papademas** |

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| Part | **1** | **2** | **3** | **4** | Total |
| *Maximum Points* | **25** points | **25** points | **25** points | **25** points | **100**G101010 pointsG |
| ***Your Score*** |  |  |  |  |  |

**Textbook Reading Assignment**

Thoroughly read Chapter(s) 12 in your Java textbook.

**Part 1 Glossary Terms**

Define, in detail, each of these glossary terms from the realm of computer programming logic and design and computer topics, in general. If applicable, use examples to support your definitions. Consult your notes or course textbook(s) as references or the Internet by visiting Web sites such as:

[**http://www.askjeeves.com**](http://www.askjeeves.com) or [**http://www.webopedia.com**](http://www.webopedia.com/)

**(a) Try and Catch Blocks**

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| An exception handler that executes code and looks for conditions that the programmer wants it to point out to the user. |

**(b) Throws an Exception**

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| When the program finds a condition that the programmer wants it to point out to the user and shows the user a message regarding the error. |

**(c) Exception versus Error**

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| Exception is a condition that a program might want to point out and an error is a serious problem that a program should not want to catch. |

**(d) File Path: Relative versus Absolute**

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| Relative file path are links that do not contain the website domain and can make it easier to change domain names without having to go through HTML pages, searching links, and changing the domain name. An absolute file path does contain the website domain nd are your basic website links you see on a daily basis. |

**(e) Zero - Indexed Array**

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| It is an array that rather than having the index beginning at 1, the initial element of a sequence is assigned the index 0. |

**Part 2 Textbook Exercises – File Processing**

Select the correct answer.

1) Which of the following will open a file named MyFile.txt and allow you to read data from it?

**A) File file = new File("MyFile.txt");**

B) FileWriter inputFile = new FileWriter();

C) File file = new File("MyFile.txt");

FileReader inputFile = new FileReader(file);

D) FileWriter inputFile = new FileWriter("MyFile.txt");

2) How many times will the following do-while loop be executed?

int x = 11;

do {

x += 20;

} while (x > 100);

**A) 0** B) 4 C) 5 D) 1

3) Look at the following code:

Scanner keyboard = new Scanner(System.in);

int studentGrade = 0;

int totalOfStudentGrades = 0;

while(studentGrade != -1) {

System.out.println("Enter student grade: :");

studentGrade = keyboard.nextInt();

totalOfStudentGrades += studentGrade;

}

In the loop header: while(studentGrade != -1), what is the purpose of "-1"?

A) It initializes the count of the number of grades.

**B) It is a sentinel.**

C) It tells the program to give the student a grade of -1, if he does not have any grades.

D) If the grade is not -1, the while statement will not be executed.

4) You can use this method to determine whether a file exists.

A) the File class's canOpen method **B) the File class's exists method**

C) the Scanner class's exists method D) the FileWriter class's fileExists method

5) Which line(s) below opens MyFile.txt allows to append data to its existing contents?

**A) File fwriter = new File("MyFile.txt");**

**FileWriter outFile = new FileWriter(fwriter, true);**

B) FileWriter outfile = new FileWriter(true, "MyFile.txt");

C) File fwriter = new File("MyFile.txt");

FileWriter outFile = new FileWriter(fwriter);

D) File outfile = new File("MyFile.txt", true);

6) A(n) \_\_\_\_\_\_\_\_ is an object that is generated in memory as the result of an error or an unexpected event.

A) default exception handler B) error message C) exception handler **D) exception**

7) In a try/catch construct, after the catch statement is executed

A) the program returns to the statement following the statement in which the exception occurred

**B) the program resumes at the statement that immediately follows the try/catch construct**

C) the program terminates

D) the program resumes at the first statement of the try statement

8) An exception‚Äôs default error message can be retrieved using this method.

A) getErrorMessage() B) getDefaultErrorMessage()

**C) getMessage()** D) getDefaultMessage()

9) In the following code, assume that inputFile references a Scanner object that has been successfully used to open a file:

double totalIncome = 0.0;

while (inputFile.hasNext())

{

try

{

totalIncome += inputFile.nextDouble();

}

catch(InputMismatchException e)

{

System.out.println("Non-numeric data encountered " +

"in the file.");

inputFile.nextLine();

}

finally

{

totalIncome = 35.5;

}

}

What will be the value of totalIncome after the following values are read from the file?

2.5

8.5

3.0

5.5

abc

1.0

A) 35.5 B) 75.0 C) 0.0 **D) 19.5**

10) Why does the following code cause a compiler error?

try

{

number = Integer.parseInt(str);

}

catch (IllegalArgumentException e)

{

System.out.println("Bad number format.");

}

catch (NumberFormatException e)

{

System.out.println(str + " is not a number.");

}

A) Because you can have only one catch clause in a try statement.

B) Because the Integer.parseInt method does not throw a NumberFormatException.

C) Because the Integer.parseInt method does not throw an IllegalArgumentException.

**D) Because NumberFormatException inherits from IllegalArgumentException. The code should handle NumberFormatException before IllegalArgumentException.**