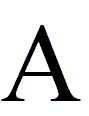
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| No. of Pages | **4** |
| No. of Questions | **3** |



**Department of Computer Science and Engineering**

**MIDTERM EXAMINATION Spring 2014**

**CSE111: Programming Language II**

**Total Marks: 50 Time Allowed: 1 Hour**



* Answer ALL questions



**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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**Theory Section: \_\_\_\_\_\_\_ Lab Section: \_\_\_\_\_\_ Lab Room Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Lab Schedule (Day and Time): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Lab Teacher Names/Initials: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

#### **Question 1 [15 Points] [Answer on the question paper]**

**class B1{**

**public static int x = 2;**

**public static int temp = 1;**

**private int sum = 0;**

**private int y = 2;**

**public B1(){**

**y = temp + 3 ;**

**sum = 3 + temp + 2;**

**temp -= 2;**

**methodA(1, 2);**

**}**

**public B1(B1 b){**

**sum = b.sum;**

**x = b.x;**

**b.methodB(2, 3);**

**}**

**public void methodB(int m, int n){**

**int y = 0;**

**y = y + this.y;**

**x = this.y + 2 + temp;**

**methodA(x, y);**

**sum = x + y + sum;**

**System.out.println(x + " " + y+ " " + sum);**

**}**

**public void methodA(int m, int n){**

**int x = 0;**

**y = y + m + (temp++);**

**x = x + 2 + n;**

**sum = sum + x + y;**

**System.out.println(x + " " + y+ " " + sum);**

**}**

**}**

**Consider the following code: [Answer on the question paper]**

|  |  |  |  |
| --- | --- | --- | --- |
| **B1 b1 = new B1();**  **B1 b2 = new B1(b1);**  **b2.methodB(3, 2);** | **x** | **y** | **sum** |
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#### **Question 2 [15 Points] [Answer on the question paper]**

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| --- |
| **public class FinalT4A{** |
| **public static int sum = 0 ;** |
| **private int y = 0;** |
| **public void methodA(){** |
| **int x=0, y=0, k=0;** |
| **int[] msg = new int[2];** |
| **msg[0] = 5;** |
| **while (k < 2){** |
| **msg[k] = k + 1;** |
| **y = y + msg[k] + x - 5;** |
| **System.out.println(x + " " + y+ " " + sum);** |
| **x = y + methodB(msg, k);** |
| **sum = x + y + msg[k];** |
| **k++;** |
| **}** |
| **System.out.println(x + " " + y+ " " + sum);** |
| **}** |
| **private int methodB(int[] mg2, int mg1){** |
| **int x = 0;** |
| **y = y + mg2[mg1];** |
| **x = x + 3 + mg1;** |
| **sum = sum + x + y;** |
| **mg2[mg1] = y + mg1;** |
| **mg1 = mg1 + x + 2;** |
| **System.out.println(x + " " + y+ " " + sum);** |
| **return mg1;** |
| **}** |
| **}** |

What is the output of the following code sequence? **[Answer on the question paper]**

|  |  |  |  |
| --- | --- | --- | --- |
| **FinalT4A.sum = 20;**  **FinalT4A fT4A = new FinalT4A();**  **fT4A.methodA();** | **x** | **y** | **sum** |
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#### **Question 3 [10 Points]**

Write a **Java Code** of a program that reads in a string (lower-case letters only) from the command line and prints the 2nd and 3rd most occurring letter. If there are multiple 2nd/3rd most occurring letters that appear same number of times, then it is fine to print any of them. **[Answer on the answer-script]**

**Example1**: if the user gives the command, **java Question3 thesepassports**

Then output should be:

Found e 2 times

Found p 2 times

**Example2**: if the user gives the command, **java Question3 yourgoodfoodshould**

Then output should be:

Found d 3 times

Found u 2 times

##### THE END