CSC 1350 Exam # 1

September 23, 2013

Section 1

NAME:

- Blue book is required. Fill in the information on the cover of your blue book and on the exam sheet.
- Answer Exercises 1, 2 and 5 on the exam sheet and all other exercises in your blue book.
- Calculators are not allowed.
- Use the back of the exam sheets if you need scratch paper.
- Read the instructions carefully before beginning the exam.
- Turn in the exam and your blue book before you leave.

DURATION: 50 Minutes

Table 1: Distribution of Points

PART	WORTH	SCORE
I	$x_1 = 40$	
II	$x_2 = 60$	
Total	$\sum_{i=1}^{2} x_i$	
Exam Score	100	/20

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

1 Exercises

Instruction: Each exercise in this section is worth 8 points.

1. Mark the following identifiers either valid or invalid by completing the chart below.

Identifier	Valid	Invalid
studentID#		
3Set		
PAY_DAY		
September 23, 2013		
_5thGrade		
salaryIn\$		
Ke\$ha		
SPEED_OF_LIGHT		

2. What is the output of the following code segment? Write the output in the chart provided, leaving an empty box to denote a whitespace. (Write only one character per box.)

```
String str1 = "lousiana";
String str2 = "university";
System.out.print("Felic"+str1.replace("lous","")+" is a ");
System.out.println(str2.substring(6,10).replace("s","c"));
System.out.println("in the state of "+str1.toUpperCase()+".");
```



- 3. What would be the output of the following statements?
 - (a) System.out.println("4" + (3 + 5) + 1 + "2");
 - (b) System.out.println(4 + 3 + 5" + 1 + 2");

- 4. Answer these questions involving mathematical expression and arithmetic operators.
 - (a) Write the Java expression dm = m * (Math.sqrt(1+v/c) / Math.sqrt(1-v/c) 1); as a functionally equivalent expression in mathematical notation.
 - (b) Write the mathematical expression $FV = PV. \left(1 + \frac{INT}{100}\right)^{YRS}$ as a functionally equivalent Java expression.
 - (c) What are the values of the following expressions? In each line assume that

```
double x = 2.5, y = -1.5;
int m = 18, n = 4;
i. x + n * y - (x + n) * y
ii. 5 * x - n/5
```

5. What is the output of the following code segment? Write the output in the chart provided, leaving an empty box to denote a whitespace. (Write only one character per box.)

```
String name = "McKenzie";
int month = 9, day = 23, year = 2013;
double salary = 5035;
```

 $\label{lem:cont.printf("Today's date is %02d/%02d/%d.%n",month,day,year); System.out.printf("%5s earned $\%.2f.%n",name,salary); \\$

