SAMPLE EXAM

Exam 1

Computer Programming 230 Dr. St. John Lehman College City University of New York Thursday, 1 October 2009

NAME (Printed)	
NAME (Signed)	
E-mail	

Exam Rules

- Show all your work. Your grade will be based on the work shown.
- The exam is closed book and closed notes.
- \bullet When taking the exam, you may have with you pens or pencils, and an 8 1/2" x 11" piece of paper filled with notes, programs, etc.
- You may not use a computer or calculator.
- All books and bags must be left at the front of the classroom during this exam.
- Do not open this exams until instructed to do so.

Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Question 6	
Question 7	
Question 8	
Question 9	
Question 10	
TOTAL	

1.	True or False:		
	(a) Alice	and Java both are object-oriented programming languages.	
	(b) Prope	erties describe the objects current state.	
	(c) The D	Oo Together statement allows you to execute statements one after another.	
	(d) Metho	ods can be developed to define additional behavior for objects.	
	(e) A var	iable declared in a method can only be used in that method.	
	(f) Paran	neters can have only numeric values.	
	(g) Contr	rol statements allow programmers to control a programs logic.	
	` '	f/Else statement allows a programmer to determine which of three sets s are to be executed.	O
	(i) A Wh remains tr	ile loop executes the statements it contains as long as the loop conditione.	or
	(j) The b	body of the loop can contain another loop, but only of the While type.	
2.	(a) What is a	method? Given an example.	
3.	Write the Alice	parameter? Give an example. e commands that will modify the penguin object to be 33% transparent, respectively.	ed
	Properties	Answer	
	color		
	opacity		
	vehicle skin texture		
	fillingStyle		
	pointOfView		
	is Showing		

- 4. To the right of each line of code, indicate the value of the logical expression after those lines have been executed.
 - (a) Again = true

Done = false

expression	True or False?
Again AND Done	

(b)	х	=	0.	v	=	1.	z	=	2

expression	True or False?
x == 0	

expression	True or False?
x != 0	

$$(d)$$
 Increment x by 1

$$\begin{array}{ccc} \text{expression} & \text{True or False?} \\ \\ x == 0 & \end{array}$$

$$\begin{array}{ccc} \text{expression} & \text{True or False?} \\ \\ y == x \end{array}$$

$$(f)$$
 Set Value of y to x

expression	True or False?
(y == 0) AND Done	

(o)	Set.	Value	οf	Done	t.o	Again

expression	True or False?
!Done OR Again	

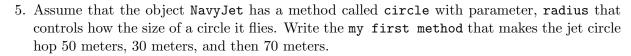
(h)	(no	change)

(i)	(no	change)
(-)	(01101100,

expression True or False?
$$(y \geq x) \ AND \ (z \geq y)$$

(i)	(no	change)
(J)	(110	change,

expression	True or False?
(IEEERemainder of $y/2$) == 0	



my first method:

6. Write the my first method for a world that shows a mummy stalking slowly with arms outstretched toward the pharaoh. When the mummy gets close, the pharaoh should gesture mystically, causing the mummy to fall backwards. Assume that the mummy and pharaoh characters have already been created.

In addition, assume that the following methods have already been written for you:

```
mummy.step()
mummy.fall()
pharaoh.gesture()
```

my first method:

7. (a) Write an If/Else statement that causes an object called coach to point at an object called player if the value of the variable score is less than 20.

(b) Write an If/Else statement that causes an object called zamboni to turn around if the value of passes is between 50 and 100.

8. In words, what does the following loop do?



9.	Write the my first method for a world where a diver makes 20 somersaults, using a loop. You may assume that the method, diver.somersault already exists. my first method:
10.	Write the my first method: for a world that displays two numbers using an 3D Text objects called Home and visitors. The world also has two variables called us and them. Your method should use a loop that continues while us and them are both less than 21. Inside the loop, you should randomly increase the values of us and them by 0 or 1 every time. These values should be displayed in the 3D Text objects.
	my first method: