

The American University in Cairo

Computer Science Department

CSCI 106

Dr. KHALIL	Quiz-II	Fall 2009
Last Name :		ID:
First Name:		Form - II

EXAMINATION INSTRUCTIONS

- * Do not turn this page until asked to do so.
- * Exam time is **40** minutes.
- * Put the answers on the same question sheet, do not use any additional papers, even for scratch.
- * Write your name, ID, section no. in the indicated places.
- * Read the exam instructions.
- * Read the honesty policy.
- * Sign the following statement.

Academic Integrity Policy

Cheating in Exams is a violation of the Academic Integrity policy of AUC. Whispering, talking, looking at someone else's paper, or copying from any source is considered cheating. Any one who does any of these actions or her/his answers indicates that she/he did any of them, will receive a punishment ranging from zero in this exam to failing the course. If repeated, it may lead to dismissal from AUC.

I have read the honesty policy and exam instructions and I am presenting this exam as entirely my effort.

Signature: _____

DO NOT USE THIS SECTION

Question	Points	Grade
1	20	
2	15	
3	15	
Total	50	

Question 1 (20 points)

What is the output of each of the following segments:

<pre>k = 1; while (k <= 20) { cout << k << endl; k += 3; }</pre>	
<pre>count = 0; sum = 0; while (count < 7) { count += 1; sum += count; cout << "The partial sum is" << setw(4) << sum << endl; } cout << "The count is" << setw(4) << count << endl;</pre>	
<pre>a = 2; b = 5; if (a < b) for (k = a; k <= b; k++) cout << k << endl; else for (k = a; k >= b; k--) cout << k << endl;</pre>	
<pre>int x = 1, y = 1; while (y < 3) { y = y + y / x++; cout << setw(3) << x << setw(3) << y << endl; }</pre>	
<pre>int k; for (k=0; k <= 15; k++) if ((k % 3) != 0) && ((k % 2) != 2)) cout << k; cout << setw(4) << k;</pre>	
<pre>int x = 1, y = 1; do { y += y / ++x; cout << setw(3) << x << setw(3) << y << endl; } while (y > 1);</pre>	
<pre>int x, y = 80; for (x = 5; x > y; x *= 2) cout << setw(3) << x << setw(3) << y << endl; cout << setw(5) << x / y;</pre>	

Question 2 (15 points)

Write a program in C++ to enter scores of n students in a test, compute the average score, highest score and lowest score in the test. Add the necessary validations on the user input.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Question 3 (15 points)

Write a program in C++ that uses nested loops to produce the following output:

1	0	0	0	0	0	0	0	0
0	2	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	0
0	0	0	4	0	0	0	0	0
0	0	0	0	5	0	0	0	0
0	0	0	0	0	6	0	0	0
0	0	0	0	0	0	7	0	0
0	0	0	0	0	0	0	8	0
0	0	0	0	0	0	0	0	9

4