

CS16, 10W, H04 Total Points: 50 ([printable PDF](#))

Available online at: <http://www.cs.ucsb.edu/~pconrad/cs16/10W/homework/H04>

Accepted: **on paper, in Lecture (11am Tuesday Jan 19th)**

**Late Policy:** No email submission allowed—and don't "slip it under my door". If you need to make it up, you must do so during office hours, or make an appointment to see me, and you must request this appointment within 48 hours of when the assignment was originally due.

**Personal Day/Sick Day policy:** Everyone is permitted one "personal day/sick day" when you get to make up a missed homework assignment for free during office hours or via appointment. After that, you may not make up the homework assignment—you can only earn back the points through extra credit opportunities.

(For more details, see the [syllabus](#) and the [homework policy](#))

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Name: (5 pts) \_\_\_\_\_ UMail address (5 pts) \_\_\_\_\_@umail.ucsb.edu

Lab Section (5 pts) Circle one:      3pm      4pm      5pm      unknown

(Note: For now, circle the lab section you are registered for on GOLD. If you need to request attendance at a different lab section because of an ACTUAL SCHEDULE CONFLICT, please email [pconrad@cs.ucsb.edu](mailto:pconrad@cs.ucsb.edu) with details)

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**This assignment is due IN Lecture on Tuesday.  
It may ONLY be turned in during Lecture on Tuesday.  
Do NOT turn it in early to your TA on Thursday in lab.**

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Since the Etter text is still not yet on reserve at the library, for this assignment, the reading is a handout that was distributed in lecture, and is also available online at this link:

<http://www.cs.ucsb.edu/~pconrad/cs16/10W/homework/H04/handout>

Once you've read that handout, write answers to the questions on this sheet (use the [PDF link](#) to print a copy of this if you weren't in class).

1. **Question:** Given the expression  $3 + 4 * 5$

Note that you don't have to give as detailed an explanation as on the handout—those detailed explanation were to help you understand where the answers came from. All that you need to provide below is the actual answer to the question.

- a. (2 pts) What is the value of the expression?
- b. (2 pts) What is the type of the expression?
- c. (2 pts) How many binary operators are in this expression?
- d. (1 pts) What is the left operand of the  $*$  operator?
- e. (2 pts) What is the right operand of the  $+$  operator?

Please turn over for questions to answer

## Continued from other side

2. Question: Given the expression  $6 == (2 + 4)$

- a. (2 pts) What is the value of the expression?
- b. (2 pts) What is the type of the expression?
- c. (2 pts) How many binary operators are in this expression?
- d. (2 pts) What are the operands of the  $==$  operator?

3. Question: Given the expression  $7 > (2 + 4 * 5)$

- a. (1 pts) What is the value of the expression?
- b. (1 pts) What is the type of the expression?
- c. (2 pts) How many binary operators are in this expression, and what are they?
- d. (2 pts) What are the operands of the  $+$  operator?

4. **Question:** Suppose that  $x$  is a variable of type `int`, with the value 3, and  $y$  is variable of type `int` with the value 2.

In the expression  $x = -(y * 3)$

- a. (2 pts) What is the value of the expression?
- b. (2 pts) What is the type of the expression?
- c. (2 pts) How many binary operators are in this expression?
- d. (2 pts) How many unary operators are in this expression?
- e. (2 pts) What is the operand of the unary operator?
- f. (2 pts) What are the operands of the  $=$  operator