

```
#####
# CS:APP Malloc Lab
# Directions to Instructors
#
# Copyright (c) 2002, R. Bryant and D. O'Hallaron, All rights
reserved.
# May not be used, modified, or copied without permission.
#
#####
#
```

This directory contains the files that you will need to run the CS:APP malloc lab, which develops a student's understanding of pointers, system-level programming, and memory management.

```
*****
1. Overview
*****
```

In this lab, students write their own storage allocator, in particular implementations of the malloc, free, and realloc functions. A trace-driven driver (mdriver) evaluates the quality of the student's implementation in terms of space utilization and throughput.

```
*****
2. Files
*****
```

Makefile	Makefile that builds the Lab
README	This file
grade/	Autograding scripts
malloclab-handout/	The files handed out to the students
src/	The driver sources
traces/	The malloc/free/realloc trace files used by
the driver	
writeup/	The malloc lab writeup

```
*****
3. Building the Lab
*****
```

Step 1: Configure the driver in src/ for your site. See src/README for detailed information on the driver.

Step 2: Modify the Latex writeup in writeup/ to reflect the handout and handin directions for your site. If you don't use Latex, use your favorite document preparation system to prepare Postscript and PDF versions of the writeup in malloclab.ps and malloclab.pdf.

Step 3: Modify the LABNAME and DEST variables in ./Makefile for your site.

Step 4: Type "make" to build the \$(LABNAME)-handout.tar file.

Step 5: Type "make dist" to copy the \$(LABNAME)-handout.tar file and the writeup to the distribution directory where the students will retrieve the lab.

```
*****
4. Grading the Lab
*****
```

There are autograding scripts for this lab. See grade/README for details.