

## cs281: Introduction to Computer Systems

### Y86 Package Installation

The following are instructions about how to install and build the package for the Y86 simulator.

1. Visit our class webpage to download the `sim.tar` file. Copy it to your `cs281` directory and untar it. It should create a subdirectory called `sim`.

```
> tar -xvf sim.tar
```

2. Enter the `sim` subdirectory. Edit the `Makefile`. Look near the top for the line with:

```
#GUIMODE=-DHAS_GUI
```

Remove the comment '#' character from the front so that the line is un-commented and active.

Find the line that reads:

```
TKINC=-isystem /usr/include
```

Change it to read:

```
TKINC=-isystem /usr/include/tcl8.5
```

Save these changes and quit the editor.

3. Compile the simulator with:

```
> make clear
> make
```

4. In your `sim/misc` directory you can now find the `yas` assembler and the `yis` simulator. Explore the `y86-code` directory for some example programs.

5. If you are fancy, you can add the `sim/misc` to your path. Here is my `.bash_profile` line:

```
PATH=$PATH" :./usr/local/cmucl-20d-x86-darwin/bin:
/Volumes/Data/home/kretchmar/cs281/sim/misc"
```

(note: this should all be on one line in your bash profile, but I had to break it in to two lines above to fit on the page).