

Cheryl Orosz

## [An Introduction to Interactive Programming in Python](#)

Summer 2013

[Joe Warren, Rice University](#)

[Scott Rixner, Rice University](#)

[John Greiner, Rice University](#)

[Stephen Wong, Rice University](#)

This course utilized an online Python interpreter/IDE called CodeSkulptor, created by one of the instructors, to write, run, and save code for assignments. It was and remains a fantastic resource, enabling peer review of code for the course and acting as a simple repository.

URLs for my assignment submissions appear below, and as of this writing (July 2015), are still available, accessible, and able to be run. I have not provided full assignment specifications, since this material is still being used for coursera.org courses, thought it has since been split into two shorter courses.

Assignments by week:

### **Week 1: Rock-Paper-Scissors-Lizard-Spock**

working URLs:

[http://www.codeskulptor.org/#user10\\_zYwHhnyZ6QkbrqS.py](http://www.codeskulptor.org/#user10_zYwHhnyZ6QkbrqS.py)

(provided template)

[http://www.codeskulptor.org/#user10\\_OyQxnFiFWOiL2dS.py](http://www.codeskulptor.org/#user10_OyQxnFiFWOiL2dS.py)

Final submission URL:

[http://www.codeskulptor.org/#user10\\_QqGbhl62Pvm25ls.py](http://www.codeskulptor.org/#user10_QqGbhl62Pvm25ls.py)

### **Week 2: Guess the Number**

working URLs:

[http://www.codeskulptor.org/#user11\\_KEgBoecnBGelpnW.py](http://www.codeskulptor.org/#user11_KEgBoecnBGelpnW.py)

(provided template)

[http://www.codeskulptor.org/#user11\\_bdYNPFBSY1\\_3.py](http://www.codeskulptor.org/#user11_bdYNPFBSY1_3.py)

[http://www.codeskulptor.org/#user11\\_XEtybKSycN3PeGY\\_8.py](http://www.codeskulptor.org/#user11_XEtybKSycN3PeGY_8.py)

[http://www.codeskulptor.org/#user11\\_XEtybKSycN3PeGY\\_8.py](http://www.codeskulptor.org/#user11_XEtybKSycN3PeGY_8.py)

[http://www.codeskulptor.org/#user11\\_XEtybKSycN3PeGY\\_14.py](http://www.codeskulptor.org/#user11_XEtybKSycN3PeGY_14.py)

[http://www.codeskulptor.org/#user11\\_UnHrYuAX9TcEdS2\\_1.py](http://www.codeskulptor.org/#user11_UnHrYuAX9TcEdS2_1.py)

Final submission URL:

[http://www.codeskulptor.org/#user11\\_hF5HwsJUbmtymbgX.py](http://www.codeskulptor.org/#user11_hF5HwsJUbmtymbgX.py)

## Week 3: Stopwatch: The Game

A simple game of trying to stop a stopwatch exactly on the whole second  
working URLs:

[http://www.codeskulptor.org/#user12\\_Wbj8hwAxQxPC2aW.py](http://www.codeskulptor.org/#user12_Wbj8hwAxQxPC2aW.py) (provided template)  
[http://www.codeskulptor.org/#user12\\_Wbj8hwAxQxPC2aW\\_0.py](http://www.codeskulptor.org/#user12_Wbj8hwAxQxPC2aW_0.py)  
[http://www.codeskulptor.org/#user12\\_mTGY5Ze7wcm8uta.py](http://www.codeskulptor.org/#user12_mTGY5Ze7wcm8uta.py)  
[http://www.codeskulptor.org/#user12\\_mTGY5Ze7wcm8uta\\_2.py](http://www.codeskulptor.org/#user12_mTGY5Ze7wcm8uta_2.py)  
[http://www.codeskulptor.org/#user12\\_mTGY5Ze7wcm8uta\\_3.py](http://www.codeskulptor.org/#user12_mTGY5Ze7wcm8uta_3.py)  
[http://www.codeskulptor.org/#user12\\_mTGY5Ze7wcm8uta\\_4.py](http://www.codeskulptor.org/#user12_mTGY5Ze7wcm8uta_4.py)  
[http://www.codeskulptor.org/#user12\\_mTGY5Ze7wcm8uta\\_5.py](http://www.codeskulptor.org/#user12_mTGY5Ze7wcm8uta_5.py)  
[http://www.codeskulptor.org/#user12\\_mTGY5Ze7wcm8uta\\_6.py](http://www.codeskulptor.org/#user12_mTGY5Ze7wcm8uta_6.py)

Final submission URL:

[http://www.codeskulptor.org/#user12\\_dmjxH03UXKBJasr.py](http://www.codeskulptor.org/#user12_dmjxH03UXKBJasr.py)

## Week 4: Pong

The classic video tennis game  
working URLs:

[http://www.codeskulptor.org/#user13\\_pHADFKxGuYJrkgZ.py](http://www.codeskulptor.org/#user13_pHADFKxGuYJrkgZ.py) (provided template)  
[http://www.codeskulptor.org/#user13\\_ktuCQgVqFCO7HBh\\_1.py](http://www.codeskulptor.org/#user13_ktuCQgVqFCO7HBh_1.py)  
[http://www.codeskulptor.org/#user13\\_ktuCQgVqFCO7HBh\\_2.py](http://www.codeskulptor.org/#user13_ktuCQgVqFCO7HBh_2.py)  
[http://www.codeskulptor.org/#user13\\_ktuCQgVqFCO7HBh\\_6.py](http://www.codeskulptor.org/#user13_ktuCQgVqFCO7HBh_6.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_0.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_0.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_2.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_2.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_3.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_3.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_4.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_4.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_5.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_5.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_6.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_6.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_7.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_7.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_8.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_8.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_9.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_9.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_12.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_12.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_13.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_13.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_14.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_14.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_15.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_15.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_16.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_16.py)  
[http://www.codeskulptor.org/#user13\\_uK4gYa5QaM\\_17.py](http://www.codeskulptor.org/#user13_uK4gYa5QaM_17.py)

Final submission URL:

[http://www.codeskulptor.org/#user13\\_TdO0BSJHaBJynip.py](http://www.codeskulptor.org/#user13_TdO0BSJHaBJynip.py)

## Week 5: Memory (card game)

A simple version of the Memory card game, using a double deck of cards numbered 0-7

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb.py) (provided template)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_0.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_0.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_1.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_1.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_2.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_2.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_3.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_3.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_4.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_4.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_5.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_5.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_6.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_6.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_7.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_7.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_8.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_8.py)

[http://www.codeskulptor.org/#user14\\_ROKuhF5niCImWOb\\_9.py](http://www.codeskulptor.org/#user14_ROKuhF5niCImWOb_9.py)

[http://www.codeskulptor.org/#user14\\_TLVj1wro7BeJl1p.py](http://www.codeskulptor.org/#user14_TLVj1wro7BeJl1p.py)

[http://www.codeskulptor.org/#user14\\_TLVj1wro7BeJl1p\\_0.py](http://www.codeskulptor.org/#user14_TLVj1wro7BeJl1p_0.py)

[http://www.codeskulptor.org/#user14\\_TLVj1wro7BeJl1p\\_1.py](http://www.codeskulptor.org/#user14_TLVj1wro7BeJl1p_1.py)

[http://www.codeskulptor.org/#user14\\_TLVj1wro7BeJl1p\\_2.py](http://www.codeskulptor.org/#user14_TLVj1wro7BeJl1p_2.py)

[http://www.codeskulptor.org/#user14\\_OcejSHxABovPp2d.py](http://www.codeskulptor.org/#user14_OcejSHxABovPp2d.py)

[http://www.codeskulptor.org/#user14\\_OcejSHxABovPp2d\\_0.py](http://www.codeskulptor.org/#user14_OcejSHxABovPp2d_0.py)

[http://www.codeskulptor.org/#user14\\_OcejSHxABovPp2d\\_1.py](http://www.codeskulptor.org/#user14_OcejSHxABovPp2d_1.py)

[http://www.codeskulptor.org/#user14\\_OcejSHxABovPp2d\\_2.py](http://www.codeskulptor.org/#user14_OcejSHxABovPp2d_2.py)

[http://www.codeskulptor.org/#user14\\_OcejSHxABovPp2d\\_3.py](http://www.codeskulptor.org/#user14_OcejSHxABovPp2d_3.py)

[http://www.codeskulptor.org/#user14\\_oHBEITsKE2L1Ei6.py](http://www.codeskulptor.org/#user14_oHBEITsKE2L1Ei6.py)

[http://www.codeskulptor.org/#user14\\_oHBEITsKE2L1Ei6\\_0.py](http://www.codeskulptor.org/#user14_oHBEITsKE2L1Ei6_0.py)

[http://www.codeskulptor.org/#user14\\_oHBEITsKE2L1Ei6\\_1.py](http://www.codeskulptor.org/#user14_oHBEITsKE2L1Ei6_1.py)

Final submission URL:

[http://www.codeskulptor.org/#user14\\_phJoPRnerzFZfvt.py](http://www.codeskulptor.org/#user14_phJoPRnerzFZfvt.py)

## Week 6: BlackJack

A simple BlackJack implementation without wagers or splits or other fancy things

[http://www.codeskulptor.org/#user15\\_vuSysr5FTxKKDBh.py](http://www.codeskulptor.org/#user15_vuSysr5FTxKKDBh.py) (provided template)

[http://www.codeskulptor.org/#user15\\_vuSysr5FTxKKDBh\\_0.py](http://www.codeskulptor.org/#user15_vuSysr5FTxKKDBh_0.py)

[http://www.codeskulptor.org/#user15\\_vuSysr5FTxKKDBh\\_1.py](http://www.codeskulptor.org/#user15_vuSysr5FTxKKDBh_1.py)

[http://www.codeskulptor.org/#user15\\_vuSysr5FTxKKDBh\\_2.py](http://www.codeskulptor.org/#user15_vuSysr5FTxKKDBh_2.py)

[http://www.codeskulptor.org/#user15\\_vuSysr5FTxKKDBh\\_3.py](http://www.codeskulptor.org/#user15_vuSysr5FTxKKDBh_3.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_0.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_0.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_1.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_1.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_2.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_2.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_3.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_3.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_4.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_4.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_5.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_5.py)

[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_6.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_6.py)  
[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_7.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_7.py)  
[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_10.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_10.py)  
[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_17.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_17.py)  
[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_20.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_20.py)  
[http://www.codeskulptor.org/#user15\\_ao9BCPTtf97XI9s\\_22.py](http://www.codeskulptor.org/#user15_ao9BCPTtf97XI9s_22.py)

Final submission URL:

[http://www.codeskulptor.org/#user15\\_ZEIAVmVaF2TbAC2.py](http://www.codeskulptor.org/#user15_ZEIAVmVaF2TbAC2.py)

## Week 7: Spaceship

preparation for Rice Rocks, an Asteroids-like game

working URLs:

[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_0.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_0.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_4.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_4.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_5.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_5.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_6.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_6.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_11.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_11.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_13.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_13.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_14.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_14.py)  
[http://www.codeskulptor.org/#user16\\_LCFv0ID6sK\\_19.py](http://www.codeskulptor.org/#user16_LCFv0ID6sK_19.py)  
[http://www.codeskulptor.org/#user16\\_7nyU8cVQ7ZG47Vb.py](http://www.codeskulptor.org/#user16_7nyU8cVQ7ZG47Vb.py)  
[http://www.codeskulptor.org/#user16\\_7nyU8cVQ7ZG47Vb\\_0.py](http://www.codeskulptor.org/#user16_7nyU8cVQ7ZG47Vb_0.py)  
[http://www.codeskulptor.org/#user16\\_7nyU8cVQ7ZG47Vb\\_3.py](http://www.codeskulptor.org/#user16_7nyU8cVQ7ZG47Vb_3.py)  
[http://www.codeskulptor.org/#user16\\_7nyU8cVQ7ZG47Vb\\_4.py](http://www.codeskulptor.org/#user16_7nyU8cVQ7ZG47Vb_4.py)  
[http://www.codeskulptor.org/#user16\\_7nyU8cVQ7ZG47Vb\\_5.py](http://www.codeskulptor.org/#user16_7nyU8cVQ7ZG47Vb_5.py)  
[http://www.codeskulptor.org/#user16\\_7nyU8cVQ7ZG47Vb\\_6.py](http://www.codeskulptor.org/#user16_7nyU8cVQ7ZG47Vb_6.py)  
[http://www.codeskulptor.org/#user16\\_cX39NBpDgp\\_0.py](http://www.codeskulptor.org/#user16_cX39NBpDgp_0.py)  
[http://www.codeskulptor.org/#user16\\_cX39NBpDgp\\_2.py](http://www.codeskulptor.org/#user16_cX39NBpDgp_2.py)  
[http://www.codeskulptor.org/#user16\\_cX39NBpDgp\\_3.py](http://www.codeskulptor.org/#user16_cX39NBpDgp_3.py)  
[http://www.codeskulptor.org/#user16\\_cX39NBpDgp\\_4.py](http://www.codeskulptor.org/#user16_cX39NBpDgp_4.py)  
[http://www.codeskulptor.org/#user16\\_cX39NBpDgp\\_5.py](http://www.codeskulptor.org/#user16_cX39NBpDgp_5.py)  
[http://www.codeskulptor.org/#user16\\_XRRQcKrMz3DVDCf.py](http://www.codeskulptor.org/#user16_XRRQcKrMz3DVDCf.py)  
[http://www.codeskulptor.org/#user16\\_XRRQcKrMz3DVDCf\\_0.py](http://www.codeskulptor.org/#user16_XRRQcKrMz3DVDCf_0.py)

(provided template)

Final submission URL:

[http://www.codeskulptor.org/#user16\\_tY9hZxJOWb1FF8Z.py](http://www.codeskulptor.org/#user16_tY9hZxJOWb1FF8Z.py)

## Week 8: Rice Rocks

an Asteroids-like game

[http://www.codeskulptor.org/#user16\\_eJCoSKdctrBifhT.py](http://www.codeskulptor.org/#user16_eJCoSKdctrBifhT.py)

(Copy of provided template)

Submitted previous project (full marks):

[http://www.codeskulptor.org/#user16\\_tY9hZxJOWb1FF8Z.py](http://www.codeskulptor.org/#user16_tY9hZxJOWb1FF8Z.py)

working URLs:

[http://www.codeskulptor.org/#user16\\_tY9hZxJOWb1FF8Z\\_0.py](http://www.codeskulptor.org/#user16_tY9hZxJOWb1FF8Z_0.py)

[http://www.codeskulptor.org/#user16\\_tY9hZxJOWb1FF8Z\\_1.py](http://www.codeskulptor.org/#user16_tY9hZxJOWb1FF8Z_1.py)

[http://www.codeskulptor.org/#user16\\_tY9hZxJOWb1FF8Z\\_2.py](http://www.codeskulptor.org/#user16_tY9hZxJOWb1FF8Z_2.py)

[http://www.codeskulptor.org/#user16\\_tY9hZxJOWb1FF8Z\\_3.py](http://www.codeskulptor.org/#user16_tY9hZxJOWb1FF8Z_3.py)

[http://www.codeskulptor.org/#user16\\_74Y2R6P6Mg81b6k\\_0.py](http://www.codeskulptor.org/#user16_74Y2R6P6Mg81b6k_0.py)

[http://www.codeskulptor.org/#user16\\_74Y2R6P6Mg81b6k\\_1.py](http://www.codeskulptor.org/#user16_74Y2R6P6Mg81b6k_1.py)

[http://www.codeskulptor.org/#user16\\_74Y2R6P6Mg81b6k\\_2.py](http://www.codeskulptor.org/#user16_74Y2R6P6Mg81b6k_2.py)

[http://www.codeskulptor.org/#user16\\_74Y2R6P6Mg81b6k\\_3.py](http://www.codeskulptor.org/#user16_74Y2R6P6Mg81b6k_3.py)

[http://www.codeskulptor.org/#user16\\_74Y2R6P6Mg81b6k\\_4.py](http://www.codeskulptor.org/#user16_74Y2R6P6Mg81b6k_4.py)

[http://www.codeskulptor.org/#user16\\_BFI5818OhGe7XX.py](http://www.codeskulptor.org/#user16_BFI5818OhGe7XX.py)

[http://www.codeskulptor.org/#user16\\_BFI5818OhGe7XX\\_0.py](http://www.codeskulptor.org/#user16_BFI5818OhGe7XX_0.py)

[http://www.codeskulptor.org/#user16\\_osvtikx3cZsqAq7.py](http://www.codeskulptor.org/#user16_osvtikx3cZsqAq7.py)

[http://www.codeskulptor.org/#user16\\_osvtikx3cZsqAq7\\_0.py](http://www.codeskulptor.org/#user16_osvtikx3cZsqAq7_0.py)

Final submission URL:

[http://www.codeskulptor.org/#user16\\_RLvqXeN7EeTiagw.py](http://www.codeskulptor.org/#user16_RLvqXeN7EeTiagw.py)