CSCI C200 Introduction to Computers and Programming

Fall 2019 Grade Report

Sweeney, Cole

Computer Science
School of Informatics, Computing, and Engineering

Indiana University, Bloomington, IN, USA

December 20, 2019

Assignment 1

Assigned: September 4, 2019
Due: September 11, 2019

Problem 1

windchill.py

50 points total
0/10 points for correct Assignment1 folder setup
10/10 points for correct module name
10/10 points for proper variable names in the calculation `(T and V)`
10/20 points for proper calculation

Score: 40/50

Problem 2

creditcard.py

50 points total
0/10 points for correct Assignment1 folder setup
10/10 points for correct module name
10/10 points for proper variable names in the calculation `(APR, C, P, i)`
10/20 points for proper calculation

"Assignment 1" is your folder name. We wanted "Assignment1" no spaces.

Score: 40/50

Total Score: 80/100

Assignment 2

Assigned: September 12, 2019
Due: September 18, 2019

Problem 1

mayhem.py

195 points total

110/120 points for functions [10 points each]:
`speed`, `distance`, `time`, `hours_to_min`, `min_to_sec`, `feet_to_mile`, `miles_to_kilometers`, `kilometers_to_miles`, `miles_to_feet`, `degrees_to_radians`, `parsecs_to_kilometers`, and `lightyears_to_parsecs`.
The function called time is incorrect. 75/75 points for functions [15 points each]:
`side_length_triangle`, `celsius_to_fahrenheit`, `fahrenheit_to_celsius`, `kelvin_to_fahrenheit`, and `percent_change`.

Score: 185/195

Problem 2

2019tax.py

60 points total
25/25 points for proper implementation of the `unmarriedTax` function.
25/25 points for proper implementation of the `marriedTax` function.
0/10 points for answering observational question.

The question the homework asked was not answered.

Score: 50/60

Problem 3

lestat.py

80 points total
40/40 points for implementation of the `receiveFrom` function with correct output.
40/40 points for implementation of the `donateTo` function with correct output.

Great Job!

Score: 80/80

Problem 4

coolline.py

35 points total
10/10 points for changing the title of the graph.
25/25 points for adding the new function to the plot.

Great Job!
−25 points for your assignment folder being named incorrectly. We want "Assignment2" ∗no spaces∗ you have "Assignment 2"

Score: 35/35

Total Score: 325/370

Assignment 3

Assigned: September 19, 2019
Due: September 25, 2019

Problem 1

funwithfunctions.py

135 points total
135/135 points for functions [15 points each]:

Nice work

Score: 135/135

Problem 3

qc1.py

50 points total
15/15 points for printing a message indicating `complex` or `not complex`.
15/35 points for a correct implementation of the `q` function with appropriate return structure for quadratic solutions.

-20 the values in the output were incorrect

Score: 30/50

Problem 4

if.py

75 points total
66/75 points for conditional statements correctly re-written [15 points for each group]:

-2 #1 if y was true it would be printed, when it shouldn't
-2 #3 should just be x and y
-5 #4 last if is incorrect

Score: 66/75

Problem 5

precmetal.py

75 points total
30/30 points for proper implementation of the `preciousMetalToDollars` function.
45/45 points for proper implementation of the `purchase` function.

Good work

Score: 75/75

Problem 6

myclock.py

25 points total
10/10 points for changing title.
15/15 points for changing font.

Awesome Job

Score: 25/25

Total Score: 331/360

Assignment 4

Assigned: September 25, 2019
Due: October 2, 2019

Problem 1

funtriangle.py

45 points total
¡¡¡¡¡¡¡ HEAD 20/45 points for correct triangle output [15 points each]:
======= 0/45 points for correct triangle output [15 points each]:
¿¿¿¿¿¿¿ 1a97a42c167246b3552cfb1304c14eb6a4c2b760

```
not correct
```

Score: 20/45

Problem 2

makeitrain.py

40 points total
0/30 points for correct implementation of `dollars` function.
0/10 point for appropriate return values and structure.

```
not finish
```

Score: 0/40

Problem 3

donor.py

60 points total
30/30 points for proper implementation of `red_blood_compatibility` function with appropriate return values.
20/30 points for proper implementation of `transfusion` function with appropriate return values.

```
Test failed for value: ['A+', 'AB+', 4]
Test failed for value: ['O-', 'A-', 100]
```

Score: 50/60

Problem 4

palindrome.py

40 points total
0/40 points for correct implementation of `palindrome` function.

not finish

Score: 0/40

Problem 5

roman.py

50 points total
0/50 points for correct implementation of `roman` function.

not finish

Score: 0/50

Problem 6

moreloops.py

115 points total
0/75 points for correct implementation [15 points each] of
`maxFor`, `maxWhile`, `minFor`, `myReplace` functions, `StringConcat`

0/40 points for correct implementation [20 points each] of
`RemoveEvens`, `sumOdd`

not finish

Score: 0/115

Problem 7

farm.py

50 points total
¡¡¡¡¡¡¡ HEAD 10/50 points for correct implementation of `roman` function.
======= 0/50 points for correct implementation of `roman` function.
¿¿¿¿¿¿¿ 1a97a42c167246b3552cfb1304c14eb6a4c2b760

not finish

Score: 10/50

Total Score: 80/400

Assignment 5

Assigned: October 3, 2019
Due: October 9, 2019

Problem 1

entropy.py

60 points total
0/30 points for correct implementation of the `makeProbability` function:
0/30 points for correct implementation of the `entropy` function:

no work

Score: 0/60

Problem 2

magic.py

60 points total
40/40 points for correct encantation [8 points each]
10/10 points for correct order of encantation
10/10 points for correct return value

Perfect!

Score: 60/60

Problem 3

ones.py

40 points total
30/40 points for correct implementation of the `lr` function

(-10) fail case [0,1,1,0,0,1,1,1,1,0]

Score: 30/40

Problem 4

nines.py

40 points total
0/40 points for correct implementation of the `div_9` function

using /9. read instruction.

Score: 0/40

Problem 5

squares.py

40 points total
0/40 points for correct implementation of the `sq` function

wrong implementation

Score: 0/40

Problem 6

luddy.py

70 points total
0/15 points for correct implementation of the `area` function
0/15 points for correct implementation of the `f` function
0/20 points for brute force solution
0/20 points for numpy solution

bugged and wrong implementation

Score: 0/70

Problem 7

wish.py

50 points total
50/50 points for correct implementation of the `is_magic` function

Perfect!

Score: 50/50

Total Score: 140/360

Assignment 6

Assigned: October 11, 2019
Due: October 14, 2019

Problem 1

alpha.py

80 points total
10/10 points for correctly opening and reading the file from the correct location
20/20 points for correctly reading the file contents
10/10 points for setting up the dictionary
30/30 points for counting lowercase letters
10/10 points for properly returning the dictionary of counted letters

Great job 100%

Score: 80/80

Total Score: 80/80

Assignment 7

Assigned: October 23, 2019
Due: October 30, 2019

Problem 1

recpractice.py

190 points total
120/150 points for correct implementation of the ten (recursive and non-recursive) functions [15 points each]
0/25 points for including a (single) for-loop to show the first ten values of each function
0/15 points for answering critical thinking questions

No B, or C18. −30
Did not display first 10 values in single for loop. −25
no question responses. −15

Score: 120/190

Problem 2

minime.py

95 points total
0/95 points for correct implementation of the six min functions [15 points all bu MIN, which is 20]

No attempt

Score: 0/95

Problem 3

twoMax.py

35 points total
0/40 points for proper implementation of `twoMax` function.

no attempt

Score: 0/40

Problem 4

isogram.py

30 points total
30/30 points for correct implementation of `is_isogram` function.

Great Work!

Score: 30/30

Problem 5

hexagram.py

35 points total
10/35 points for correct implementation of `hex_dec` function.

Not quite. Go back and look how a conversion to a different base works. −25

Score: 10/35

Problem 6

doctor.py

60 points total
30/30 points for correct implementation of appendicitis prediction logic
10/10 points for correct input functionality
10/10 points for correct and informative output
10/10 points for meaningful and informative comments

Lots of informative comments!
Great Work!

Score: 60/60

Problem 7

astronomy.py and stellar.py

50 points total
20/20 points for completing the `astronomy.py` module.
20/30 points for completing the functions in the `stellar.py` module.

Close, but check your formula again. radius != d. -10

Score: 40/50

Total Score: 260/500

Assignment 8

Assigned: November 1, 2019
Due: November 6, 2019

Problem 1

fignewton.py

50 points total
0/20 points for correct implementation and integration of user input: function and initial estimate [10 points each].
0/30 points for correct implementation and integration of user input: threshold and iteration bound [15 points each].

Well done!

Score: 50/50

Problem 2

mybisect.py

50 points total
15/15 points for correct implementation of the `sign` function.
25/35 points for correct implementation of the `bisect` function.

(−10) for incorrect values

Score: 40/50

Problem 3

game1.py

50 points total
50/50 points for proper implementation of color changing square.

Well done!

Score: 50/50

Problem 4

secant.py

50 points total
50/50 points for correct implementation of `secant` function.

well done!

Score: 50/50

Problem 5

easycalc.py

50 points total
10/50 points for correct implementation of `simpson` function.

(−40) No new code implemented

Score: 10/50

Problem 6

rec.py

200 points total
200/200 points for correct implementation of `even`, `odd`, `b`, `btr`, `bm`, `gg`, `gtr`, `gm` functions [25 points each].

Well done!

Score: 200/200

Total Score: 400/450

Assignment 9

Assigned: November 7, 2019
Due: November 13, 2019

Problem 1

randomwalk.py

60 points total
0/60 points for correct implementation of the `step` function.

Great job 100%

Score: 60/60

Problem 2

mymap.py

50 points total
0/25 points for adding the geolocation of IU's Musical Arts Center.
0/25 points for adding it to the list of points and plotting it.

Great job 100%

Score: 50/50

Problem 3

complex.py

90 points total
0/40 points for correct implementation of the `__sub__` and `__truediv__` functions [20 points each].
0/50 points for correct implementation of the `molulus` and `polar` functions [25 points each].

−5 polar is incorrect
−15 truediv is incorrect

Score: 65/90

Total Score: 180/200

Assignment 10

Assigned: November 14, 2019
Due: November 20, 2019

Problem 1

haversine.py

60 points total
0/45 points for correct implementation of the `hd` function.
0/15 points for answering the analysis questions.

−10: function hd failed multiple test cases.
−5: answer not sufficient enough. You should have discussed about how one is better than the other.

Score: 45/60

Problem 2

lineclass.py

50 points total
0/25 points for correct implementation of `__init__` class function.
0/25 points for correct implementation of `__mul__` class function.

−50: Syntax errors in the code, could not run it.

Score: 0/50

Problem 3

weird.py

60 points total
0/25 points for correct implementation of `f` function.
0/25 points for correct implementation of `g` function.
0/10 points for answering the analysis question.

good job!

Score: 60/60

Problem 4

matrix.py

120 points total
0/120 points for correct implementation of matrix functions [30 points each].

−120: Syntax error in the code, doesn't run.

Score: 0/120

Problem 5

correlation.py

80 points total
0/20 points for correct implementation of the `mean` function.
0/20 points for correct implementation of the `sd` function.
0/20 points for correct function calls to calculate the correlation coefficient.
0/20 points for correctly producing a plot named `stock.png`.

−80: Syntax error in the code, doesn't run.

Score: 0/80

Total Score: 105/370

Processing Real Data

Assigned: November 7, 2019
Due: November 13, 2019

Part 1

Deliverables

10 points total
0/10 points for expect.py and graph state_county.png

−5: Syntax error, code does not run.

Score: 5/10

Part 2

Functionality

120 points total
0/120 points for correct data processing and analysis.

−60: Syntax error, code does not run.

Score: 60/120

Part 3

Graph

170 points total
0/25 points for correct title.
0/25 points for correct legend.
0/120 points for correct graph of life expectancy for male and female.

−85: Syntax error, code does not run.

Score: 85/170

Total Score: 150/300

Assignment 10

Assigned: November 14, 2019
Due: November 20, 2019

Problem 1

haversine.py

60 points total
0/45 points for correct implementation of the `hd` function.
0/15 points for answering the analysis questions.

−10: function hd failed multiple test cases.
−5: answer not sufficient enough. You should have discussed about how one is better than the other.

Score: 45/60

Problem 2

lineclass.py

50 points total
0/25 points for correct implementation of `__init__` class function.
0/25 points for correct implementation of `__mul__` class function.

−50: Syntax errors in the code, could not run it.

Score: 0/50

Problem 3

weird.py

60 points total
0/25 points for correct implementation of `f` function.
0/25 points for correct implementation of `g` function.
0/10 points for answering the analysis question.

good job!

Score: 60/60

Problem 4

matrix.py

120 points total
0/120 points for correct implementation of matrix functions [30 points each].

−120: Syntax error in the code, doesn't run.

Score: 0/120

Problem 5

correlation.py

80 points total
0/20 points for correct implementation of the `mean` function.
0/20 points for correct implementation of the `sd` function.
0/20 points for correct function calls to calculate the correlation coefficient.
0/20 points for correctly producing a plot named `stock.png`.

−80: Syntax error in the code, doesn't run.

Score: 0/80

Total Score: 105/370