

# CSCI C200 INTRODUCTION TO COMPUTERS AND PROGRAMMING

## SPRING 2020 GRADE REPORT

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## Assignment 1

Assigned: January 22, 2020

Due: January 29, 2020

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### Problem 0

#### C200-Assignments

25 points total

10/10 Assignment 1 folder setup correctly

15/15 windchill.py, creditcard.py, and pizza.py exist and are named correctly (5 pts each)

Score: 25/25

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### Problem 1

#### windchill.py

25 points total

5/5 Windchill function looks correct

20/20 Passes test cases (5 pts each)

*Nice job !*

Score: 25/25

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### Problem 2

#### creditcard.py

25 points total

15/15 A reasonable attempt was made

10/10 Code works correctly

*Very nice!*

**Score:** 25/25

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**Problem 3**

**pizza.py**

25 points total

5/5 A function was used

20/20 Graded on effort

**Score:** 25/25

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**Total Score:** 100/100

## Assignment 2

Assigned: 2020-01-30

Due: 2020-02-05

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### Mayhem

**mayhem.py**

195 points total

0/85 Function is syntactically correct (5 for each)

0/60 Points of functions (5 for each)(speed, distance, time, hours\_to\_min, min\_to\_sec, feet\_to\_mile, miles\_to\_kilometers, k\_to\_m, miles\_to\_feet, degrees\_to\_radians, p\_to\_k, ly\_to\_p)

0/50 Points for each (10 for each) (loc\_c, c\_to\_f, f\_to\_c, k\_to\_f, pc)

*-5: pc is incorrect.*

**Score: 190/195**

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### Taxing

**2019tax.py**

50 points total

0/25 Proper implementation of the `unmarriedTax` function.

0/25 Proper implementation of the `marriedTax` function.

*good work!*

**Score: 50/50**

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## Circuit

**circuit.py**

34 points total

0/10 Utilizes **and**, **or**, and **not**

0/24 Correct output (3 points per each output)

*good work!*

**Score: 34/34**

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## Plotting

**coolline.py**

55 points total

0/25 Program runs

0/15 Title name changed

0/15 Function added to graph

*good work!*

**Score: 55/55**

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**Total Score: 329/334**

## Assignment 3

Assigned: 2020-02-06

Due: 2020-02-12

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### Structuring

35 points total

10/10 Assignment 3 folder setup correctly

25/25 funwithfunctions.py, qc1.py, if.py, precmetal.py, and myclock.py exist and are named correctly (5 pts each)

0/0 General notes to be aware of, not a deduction of points

*Great job 100%*

**Score: 35/35**

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### Problem 1

#### funwithfunctions.py

150 points total

90/90 Functions produce correct output (10 pts for each)

45/45 Functions look correct/ a reasonable attempt was made (5 pts each)

5/5 Answering the deliverable question

10/10 Provided code, i.e, test code, is from original document

*Great job 100%*

**Score: 150/150**

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### Problem 3

**qc1.py**

100 points total

10/10 Code runs

20/20 Will print a message correctly depending on Complex or Not Complex

20/20 Function properly returns a tuple of values

40/50 Functions return proper values

*-10: Code failed 2 test cases.*

**Score: 90/100**

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### Problem 4

**if.py**

60 points total

0/15 Part 1 converted from ifs to if-elif-else

0/15 Part 2 converted from 1 if to 2 ifs

0/15 Part 3 convert from many nots to fewer nots

0/15 Part 4 convert from one line to if-elif(s)-else

*-60: no code submitted.*

**Score: 0/60**

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### Problem 5

**precmetal.py**

80 points total

20/20 preciousMetalToDollars: returns the cost without modifying the original amount values. (5 pts per amount)

25/25 purchase: returns print statement, 2 lines if removing value, 1 line if not enough amount

25/25 purchase: Modifies the value correctly and does not change unless enough value is there

10/10 Did not modify original code

*Great job 100%*

**Score: 80/80**

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### **Problem 6**

**myclock.py**

30 points total

10/10 Clock runs

10/10 Title name changed to the student's name

10/10 Font changed from 'arial' to 'gothic'

*Great job 100%*

**Score: 30/30**

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**Total Score: 385/455**



## Assignment 4

Assigned: 2020-02-12

Due: 2020-02-19

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### Structuring

45 points total

10/10 Assignment 4 folder setup correctly

35/35 funtriangle.py, makeitrain.py, donor.py, palindrome.py, roman.py, moreloops.py, and farm.py exist and are named correctly (5 pts each)

0/0 General notes to be aware of, not a deduction of points

*Great job 100%*

**Score: 45/45**

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### Problem 1

#### funtriangle.py

45 points total

0/10 Triangle 1 created correctly

0/20 Triangle 2 created correctly with accurate pattern

0/15 Triangle 3 created correctly

*-45: no submission.*

**Score: 0/45**

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## Problem 2

`makeittrain.py`

45 points total

5/5 Code runs

10/10 Returns a list (or a tuple) with 4 values

10/10 Code looks reasonably correct

15/20 Test values

*-5: Failed one test case.*

**Score:** 40/45

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## Problem 3

`donor.py`

80 points total

15/15 Did not modify code outside of function

10/10 redbloodcompability: Returns the desired type (List or tuples of blood types)

5/5 transfusion: Returns a 0 or 1

10/10 transfusion: Modifies bank IF enough of the blood type

10/10 transfusion: Rejects if types not compatible or not enough in bank

15/15 Passes test cases for function redbloodcompability

15/15 Passes test cases for function transfusion

*Great job 100%*

**Score:** 80/80

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#### Problem 4

**palindrome.py**

45 points total

0/20 Utilizes a loop

0/10 Returns a boolean

0/15 Passes test cases

*-45: no submission.*

**Score: 0/45**

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#### Problem 5

**roman.py**

60 points total

15/15 Did not modify code outside of function

15/15 Returns a string

15/15 Did not modify code outside of function

5/15 Passes test cases

*-10: Failed 2 test cases.*

**Score: 50/60**

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#### Problem 6

**moreloops.py**

175 points total

0/15 Function maxFor was reasonably attempted, run, and returns correct type (5 for each part)

0/15 Function maxWhile was reasonably attempted, run, and returns correct type (5 for each part)

0/15 Function minFor was reasonably attempted, run, and returns correct type (5 for each part)

0/15 Function RemoveEvens was reasonably attempted, run, and returns correct type (5 for each part)

0/15 Function myReplace was reasonably attempted, run, and returns correct type (5 for each part)

0/15 Function sumOdd was reasonably attempted, run, and returns correct type (5 for each part)

0/15 Function StringConcat was reasonably attempted, run, and returns correct type (5 for each part)

35/70 Passes test cases

*−35: Funcitons — maxWhile, sumOdd, StringConcat  
failed all test cases. minFor failed 2 test cases.*

**Score:** 35/175

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## **Problem 7**

**farm.py**

50 points total

15/15 Calculated f correctly

0/15 Utilizes the vol function (inside main or in f, either or) correctly

0/15 Does a brute force inside of main

0/5 Passes test cases

*−35: Failed all test cases.*

**Score:** 15/50

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**Total Score:** 265/545

## Assignment 5

Assigned: 2020-02-21

Due: 2020-02-24

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### Structuring

30 points total

10/10 Assignment 5 folder setup correctly

20/20 add.py, magic.py, votetally.py, votes.txt (5 for each)

0/0 General notes to be aware of, not a deduction of points

*Great job 100%*

**Score: 30/30**

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### Problem 1

**add.py**

45 points total

5/5 Code runs

10/10 Does not modify code outside of function

30/30 Gets the function to modify the label

*Great job 100%*

**Score: 45/45**

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### Problem 2

**magic.py**

59 points total

15/15 Code runs

10/10 Returns a number

14/14 Code contains all of the operations (2 points per each)

20/20 Test values

*Great job 100%*

**Score: 59/59**

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### **Problem 3**

**votetally.py**

75 points total

10/10 Makes it easy to determine what the number of yes and no's are

20/20 Values are correct

20/20 Path to read is 'Assignment5/votes.txt' per the directions

10/10 Reads the file properly

15/15 Code runs

*Great job 100%*

**Score: 75/75**

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**Total Score: 209/209**

## Assignment 6

Assigned: 2020-03-05

Due: 2020-03-11

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### Structuring

50 points total

0/10 Assignment 6 folder setup correctly

0/40 entropy.py, alpha.py, happy.txt, ones.py, nines.py, squares.py, luddy.py, wish.py (5 for each)

0/0 General notes to be aware of, not a deduction of points

*Not submitted / incorrect*

**Score: 0/50**

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### Problem 1

#### entropy.py

80 points total

0/5 makeProbability returns a list of floats

0/15 Code for makeProbability looks correct

0/5 entropy returns a float

0/15 Code for entropy looks correct

0/20 Test cases for makeProbability

0/20 Test cases for entropy

*Not submitted / incorrect*

**Score: 0/80**

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## Problem 2

**alpha.py**

60 points total

0/10 Path used is 'Assignment6/happy.txt', as shown in the assignment file

0/10 The dictionary is prepared. They don't hard code specific letters ('z':0). Allowed to fill the dictionary with default values for ALL letters.

0/26 Counts are correct

0/6 Printed out in order (all or nothing) without using built-in sort function

0/8 Each letter is printed on own line (all or nothing)

*Not submitted / incorrect*

**Score: 0/60**

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## Problem 3

**ones.py**

70 points total

0/20 Uses a loop to count the number of occurrences 1s in a row.

0/10 Returns an integer

0/40 Test cases

*Not submitted / incorrect*

**Score: 0/70**

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## Problem 4

**nines.py**

70 points total

0/10 Returns a boolean



0/20 Reduces the integer to a single value

0/40 Test cases

*Not submitted / incorrect*

**Score: 0/70**

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### **Problem 5**

**squares.py**

65 points total

0/25 Correct number of stars for a given n

0/25 Number of stars on each level is correct

0/15 Function will work for any n greater than 1

*Not submitted / incorrect*

**Score: 0/65**

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### **Problem 6**

**luddy.py**

115 points total

0/5 Function area returns a boolean

0/20 function area looks correct

0/5 Function f returns a float or integer

0/10 Function f utilizes the formula correctly

0/15 Function f looks correct

0/30 Implements brute force correctly. (nested loops and updates the minimum in the loop).

0/10 Test cases for area

0/20 Test cases for f

*Not submitted / incorrect*

**Score:** 0/115

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**Problem 7**

**wish.py**

70 points total

0/10 Returns a float

0/20 Function utilizes multiple loops (in order to find the average of the whole matrix)

0/20 Code looks reasonably correct

0/20 Test values

*Not submitted / incorrect*

**Score:** 0/70

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**Total Score:** 0/580

## Assignment 50

Assigned: 2020-03-05

Due: 2020-04-03

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### Structuring

10 points total

10/10 Assignment 50 folder setup correctly, including data.csv

0/0 General notes to be aware of, not a deduction of points

*Nice job !*

**Score: 10/10**

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### Problem 1

**expect.py**

290 points total

10/10 data.csv is in the repo

10/10 Relative path to the data file is correct

0/30 Plot is saved to a png file

0/30 Plot has a legend for the 6 data types, with separate colors and symbols

0/30 Plot has correct title

70/90 Proper data processing and analysis (including correct county and year)

60/90 Correct graph of life expectancy for male and female.

*-30 No legend*

*-30 Plot is not saved as a png*

*-30 No title*

–50 1) *The y axis is not legible at all. 2) There should only be 2 colors for the lines, and dashes to denote what the line is showing. 3) None of the information displayed is correct*

**Score:** 150/290

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**Total Score:** 160/300

## Assignment 60

Assigned: 2020-03-05

Due: 2020-04-01

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### Structuring

0 points total

0/0 General notes to be aware of, not a deduction of points

Score: 0/0

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### Problem 1

letters.py

25 points total

10/10 foot function passes test cases (0 if tail recursion isn't used)

15/15 foot function looks correct

*Nice job !*

Score: 25/25

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### Problem 2

travel.py

25 points total

5/5 distance.txt file has the data in the correct format to be read in

10/10 d function passes test cases

10/10 d function looks correct

*Nice job !*

**Score: 25/25**

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### **Problem 3**

**sorting.py**

20 points total

0/10 Code works correctly

3/10 Code looks correct

*lambda function only returns first argument.*

**Score: 3/20**

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### **Problem 4**

**recur.py**

30 points total

10/10 x and y test cases

20/20 x and y functions look correct

*Nice job !*

**Score: 30/30**

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**Total Score: 83/100**