

CIS 30A Programming Assignment 1

You can use any resources in the Canvas and your textbook but do not Google or use Chegg or any other internet resources. Do not discuss programming assignment questions with anyone including your classmates. If you have any questions about the programming assignment, contact your instructor. Do not discuss programming assignment questions in Discussion Board.

Please submit your work to Canvas by 11:59 PM 9/25/2022. Be sure to submit your work using Python IDLE and must be submitted in .py file.

NO LATE ASSIGNMENT WILL BE ACCEPTED.

Please sign below and submit it with your test.

“I affirm that I will not give or receive any unauthorized help on this exam, and that all work will be my own.”

Signature _____

Q1. (5 pts) Consider following list of cities.

San Francisco, Los Angeles, Portland, Seattle, New York, Boston, Chicago, St. Louis, Dallas.

Please show your input and output for following questions

- a) Create a list call cities with cities listed above
- b) Sort the cities in alphabetical order
- c) Print the city at location 4
- d) Print the cities at location 2 to 4
- e) Add Cincinnati to the list
- f) Determine if Miami is in the list
- g) Sort the list in the reverse order
- h) Determine the length of the list
- i) Add Denver to the beginning of the list without replacing existing item in the beginning of the list.

Q2. (5 pts) Suppose first and last are names. Write the code that prints them with first initials swapped. For example, if first = "Monty" and last = "Python" the code will print Ponty Mython.

Q3. (5 pts) Write the code that asks user for the length and height of a rectangle and prints the area of that rectangle.

Q4. (5 pts) The variable inches hold an integer number of inches. Write the code that prints the equivalent number of feet and inches. So, if inches = 29 your code should print 2 feet, 5 inches.

Q5. (5 pts) Write the code that asks a user for his/her name and age and prints that 2020+age will be a great year. If their name is Mickey and their age is 19 the output of your program should exactly match the following.

Please tell me your name: Mickey

How old are you, Mickey? 19

Then 2039 will be your year!

Q6. (5 pts) We all know that $360^\circ = 2\pi$ radians. Write the code that asks the user to input an integer number of degrees, converts it to radians, and prints the result. (An approximate answer is fine.)

Q7. (5 pts) Suppose mystring is a string containing an odd number of letters. Write the code segment that would print its middle character to the screen.

Q8. (5 pts) Create a dictionary that maps the following countries to their respective capitals. The capitals are indicated in parenthesis beside the country names below.

USA(Washington D.C)

United Kingdom(London)

China(Beijing)

Japan(Tokyo)

France(Paris)

a) Delete the third country from the dictionary and print the dictionary

b) Add Germany(Berlin) to the dictionary and print the dictionary

Q9. (5 pts) Write print command that prints out following. Your code must use `''' '''` to contain all code within one statement

Date:

December 25, 2022

Time:

11:50 PM

Venue:

Convention Center

Number of guests:

200

Q10. (5 pts) Write a python code call message that prints out following using place holders and `.format()` method

The price of this Apple laptop is 1299 USD and the exchange rate is 1 USD to 1.320 Canadian dollar

You must use place holder for name of the laptop = Apple, the price =1299 and the exchange rate is 1 USD to 1.320 Canadian dollar.