

Assignment 4

1. Using assignment #2, derive a SoftwareTester class from the Employee class. Add the following data members to the a SoftwareTester class:
 - a. A character pointer for the SoftwareTester's address (e.g. char * address)
 - b. A character pointer for the SoftwareTester's city
 - c. A character pointer for the SoftwareTester's state
 - d. A zip code
2. Write and test change address, city, state, and zip code member functions for the SoftwareTester class.
3. Write a copy constructor for the SoftwareTester class.
4. Write a deep copy member function for the SoftwareTester class.
5. Change the print SoftwareTester function to display all its data members.
6. Change the age and city of a SoftwareTester. Test your change methods.

Note: (a) Your constructors for the SoftwareTester class that have parameters should use dynamic memory and (b) you will have to write a destructor that frees dynamic memory

Test your program by

Adding a cout statement to your copy constructor, constructors, and destructors.

1. Write a function that passes by copy (the copy constructor should be called)
2. Write a function that passes by reference

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3. Write a function that returns by copy (the copy constructor should be called)
4. Write a function that returns by reference (the copy constructor should not be called)
5. Use the initialization construct (the copy constructor should be called)
6. Test your deep copy function

SoftwareTesters

Name	Employee's Id	Phone	Age	Gender	Job title	Salary	Hire Date
Joe Calculus	64879	949-555-1234	42	M	Math Wiz	\$110,000	8/31/2017
Mary Algebra	76309	213-555-5555	22	F	Math Helper	\$170,123	05/08/2017
Jo Trig	10192	714-703-1234	29	F	Math Contact	\$200,000	12/25/2016

Name	Address	City	State	Zip Code
Joe Calculus	1234 Main Avenue	Laguna Niguel	CA	92677
Mary Algebra	3333 Marguerite Pkwy	Mission Viejo	CA	92646
Jo Trig	9876 Elm Street	San Clemente	CA	92672