

Advanced Programming COEN 11

Lab 4

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□ People List - information

- Name
- Age
- Status
 - Age \leq 21 - name of school
 - $21 < \text{Age} < 65$ - salary per month
 - Age \geq 65 - years of retirement

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□ People List -- commands

➤ 0 - to input a person

- Name, Age, Status

➤ 1 - to delete a person

- Name

➤ 2 - to show the current list of info

➤ 3 - to quit

Lab 4

- ❑ Your program has 1 array of structures
 - Each struct has three members
 - name - char array
 - age -- int
 - status - union (type depends on age)
 - Each union has three members
 - » school name (age ≤ 21) - char array
 - » salary per month ($21 < \text{age} < 65$) - float
 - » year of retirement (age ≥ 65) - int

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- ❑ Your program keeps a counter, which indicates how many elements are in the list
- ❑ According to the command, the program
 - 0 - insert an element at the position indicated by counter and increase the counter
 - 1 - delete the element with the given name
 - to keep all the elements together, copy the last one to the deleted one and decrease the counter
 - 2 - show all the elements, from position zero to counter-1
 - 3 - quit

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□ Requirements

➤ 1 array of structures

- one of the members in the struct is a union

➤ Global variables:

- array and counter ONLY!!

➤ 4 functions:

- main, insert, delete, show