C++ Programming

Char Arrays Homework 2

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Homework 7: Compressing

- Read a string of letters and then compress each group of same letter
    - E.g. if the sub-string is cccc $\Rightarrow$ c4
    - Use _ between each group
- Input $\Rightarrow$ Outputs
    - ccccDDDxxxxxxxxe $\Rightarrow$ c4_D3_x8_e1
    - Xxxxxxxx $\Rightarrow$ x8

Homework 8: Compare strings

- Read 2 strings, then output YES if the first smaller than or equal to second. Otherwise, output NO
  - Don't use < operator to compare strings. Use loops
- Input ⇒ Output
  - aaa aaa ⇒ YES
  - aaaaa aa ⇒ NO
  - abc d ⇒ YES
  - ddddddddddddd xyz ⇒ YES
  - azzzzzzz za ⇒ YES
  - za azzzzzzz ⇒ NO

Homework 9: Add 5555

- Read a **very long** string of digits (at least 6 digits), and add 5555 to it.
  - Don't convert to integer, as integer has max limit for values
- Input ⇒ Outputs
  - "100000" ⇒ "105555"
  - "10001234" ⇒ "10006789"
  - "3001072" ⇒ "3006627"
  - "10999999999" ⇒ "11000005554"
  - "999999999999999999999999999999" ⇒ "1000000000000000000000000005554"

Homework 10: Employee Program (v1)

- Help our factory in managing his employees. Create a program that does the following:
  - Display the following choices:
    - Enter your choice:
    - 1) Add new employee
    - 2) Print all employees
    - 3) Delete by age
    - 4) Update Salary by name
  - You will keep the program running forever. Display the choices and user input from 1 to 4

Homework 10: Employee Program (v1)

- For choice 1: Allow the manager to enter information of an employee
  - Ask user to input: Name, Age, Salary and Gender letter
  - Add the information to your database
- For choice 2: Print all employees. Line per employee
- For choice 3: User enter to values, start age and end age
  - Find all employees with: start_age <= age <= end_age and remove them
- For choice 4: User enter name, then salary
  - Find the employee and update his salary
- See screenshots

Homework 10: Employee Program (v1)

```
Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
1
Enter name: mostafa
Enter age: 33
Enter salary: 12345
Enter gender (M/F): M

Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
1
Enter name: Mona
Enter age: 28
Enter salary: 3333
Enter gender (M/F): F

Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
2
*****************************
mostafa 33 12345 M
Mona 28 3333 F
```

```
Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
4
Enter the name and salary mostafa 505

Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
2
*****************************
mostafa 33 505 M
Mona 28 3333 F
```

```
Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
3
Enter start and end age
20 30

Enter your choice:
1) Add new employee
2) Print all employees
3) Delete by age
4) Update Salary by name
2
*****************************
mostafa 33 505 M
```

"Acquire knowledge and impart it to the people."

"Seek knowledge from the Cradle to the Grave."