

Question paper (build 07.05.20.19)

Practical exam 01: 120 minutes

1. (3 points) Write a program that will accept data of a day then print out whether they are valid or not. Remind that Leap year (y) is a year that: $y \% 400 == 0$ or ($y \% 4 == 0$ and $y \% 100 != 0$).

If the user enters anything other than interger numbers put out an appropriate message and ignore the number. For example

Enter a day: 30
Enter a month: 2
Enter a year: 2000
Invalid day.

Enter a day: 29
Enter a month: 2
Enter a year: 2000
Valid day.

2. (3 points) Write a program to read through the file "Text.txt", convert key-value string from the file to dictionary.

Once the text is converted, print out the result.

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Enter a day: 29
Enter a month: 2
Enter a year: 2000
Valid day.

2. (3 points) Write a program to read through the file "Text.txt", convert key-value string from the file to dictionary.

Once the text is converted, print out the result.

For example, enter a file name "Text.txt" or leave it blank and match the output below.

Enter file: Text.txt
Enter file:
The converted dictionary is:

- 1 Hello
- 2 Goodbye
- 3 Bye bye
- 4 See you
- 5 Hi there
- 6 Bye for now
- 7 Python

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The converted dictionary is:

- 1 Hello
- 2 Goodbye
- 3 Bye bye
- 4 See you
- 5 Hi there
- 6 Bye for now
- 7 Python

8 Convert

9 pair

10 comma

3. (4 points) Write a program to manage students' GPA including ID, Name, Math, Physic and Chemis. The program reads data from the file "Data.txt" and save to the database file Mark.sqlite using the following table schema.

Marks (ID, Name, Math, Physic, Chemis, Sum, Result)

Where:

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9 pair

10 comma

3. (4 points) Write a program to manage students' GPA including ID, Name, Math, Physic and Chemis. The program reads data from the file "Data.txt" and save to the database file Mark.sqlite using the following table schema.

Marks (ID, Name, Math, Physic, Chemis, Sum, Result)

Where:

Sum = Math + Physic + Chemis

Result = "Pass" if Sum >= 15, otherwise, Result = "Not pass".

The program prints the student list whose sum > 10 and sorted in descending order by Sum. The output should be as follows:

Student list:

ID	Full Name	Math	Physic	Chemis	Sum	Result
A001	Le Van Hoa	8.0	7.5	8.0	23.5	Pass
A002	Ho Ngoc Hoa	6.5	7.0	8.0	21.5	Pass
A003	Tran Le Nam	5.0	5.5	4.0	14.5	Not pass

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