

Introduction to Programming EE2310 Homework 1

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Problem - Bill Generator

Obtain information from the terminal and output a complete bill.

My Solution

Using `getline` and `cin` function to obtain the information and save them into separate variables. Then use `cout` function to print out the full bill (also calculated **tax** and **total** at the same time).

Additional Features

- All the numbers will display to the second digit after the decimal point by using the `setprecision` function in `cout`.
- The screen will automatically cleared after all the variables are entered by using the `system("cls");` command.

Program Flow & Structure

```
int main()
{
    // ...
    getline → cin → system("cls"); → cout → return 0
}
```

Discussions

- Is there any other way to get the input of a string (or a char array) with spaces without using `getline()`?
>>Tear the date into three parts or using the `getchar()` function are also feasible ways.

Output Result

```
C:\Qt\Qt5.3.1\Tools\QtCreator\bin\qtcreator_process_stub...  
billing_date: November 23th, 2014  
firstname: Jason  
date1: 08/01/2014  
date2: 09/01/2014  
base: 30  
local: 5  
international: 10  
pay_date: 09/30/2014
```

```
C:\Qt\Qt5.3.1\Tools\QtCreator\bin\qtcreator_process_stub...  
November 23th, 2014  
Dear Jason customer:  
The following is this month's billing details.  
  
Bill cycle: from 08/01/2014 to 09/01/2014  
  
Base plan:.....$30.00  
Local calls:.....$5.00  
International calls:.....$10.00  
Tax: (<$30.00+$5.00+$10.00>)*9%.....$4.05  
Total:.....$49.05  
  
Please pay the above total by 09/30/2014.  
  
Billing Department  
One Telecommunication  
  
Press <RETURN> to close this window...
```