

LAB 06: C Programming

You have finished on program in machine language and four programs in assembly language, and do you realize the differences between low-level programming language and high-level programming language?

Your Mission:

1. Implement **lab02** to **lab05** again but in C language.
2. Think about and write down the difference between low-level programming language and high-level programming language.

Details, Notes and Suggestions:

1. You can do anything you want to make **lab02** to **lab05** suitable for C.
2. Any direct memory access operation for input or output can be replaced by *scanf* or *printf* or any other functions.
3. You can use array, struct and any features supported by C.
4. Please include all labs in one file, like

```
lab02();  
  
lab03()  
  
...  
  
main(){  
  
    lab02();  
  
    lab03();  
  
    ...  
  
    lab05();  
  
}
```

Additional Requirements:

If you don't comply with these requirements, the lab may be counted as an invalid work.

1. The report shall contain at least 3 parts: How do you work out the algorithm? How do you write the program? And how do you design your own test cases to ensure the program works fine?
2. Save your report in pdf format and name it such as **report.pdf**.
3. Your program should be renamed to **program.c**.
4. Put your report and codes in a directory named after your student number and pack it (e.g. **PB07210340_张海博_LAB06.zip**).