

Introduction to Computers and Programming LAB-3^{2014/10/01}

- ✧ You cannot use **Selection Statements** (if, else ...) or **Iteration Statements** (for, while) even if you have learned them.
- ✧ Your output must be in our sample output format.

1. Write a program that asks the user to enter a NT dollar amount and then shows how to pay that amount using the **smallest** number of NT\$20, NT\$10, NT\$5 and NT\$1 bills.

```
Enter a dollar amount: 93
$20 bills: 4
$10 bills: 1
$5 bills: 0
$1 bills: 3
請按任意鍵繼續 . . .
```

2. Finish the following program in which you will enter a five digit number. The program will reverse the five digits number, write you code to replace the region of the comment.

Note: You **should not** modify other region of the code.

```
int main()
{
    int num ,result=0;
    printf("Enter x: ");
    scanf("%d", &num);

    /* Please write your code here */

    printf ("%d\n", result);
    system ("pause");
    return 0;
}
```

```
Enter x: 42139
93124
請按任意鍵繼續 . . .
```

3. Write a program that the user can enter a positive decimal number (0~31) and then shows it in 5-bit binary format.

```
Enter a decimal number x: 6
The binary format is: 00110
請按任意鍵繼續 . . .
```

```
Enter a decimal number x: 25
The binary format is: 11001
請按任意鍵繼續 . . .
```

4. (Bonus) There are three flights that take off from Taiwan simultaneously. Each has a different flight destination: San Francisco, Japan, and England respectively. Please enter the local time (of Taiwan) when the flights take off, the flight durations of the three flights (in minutes), and then output the local time (of the destinations) when the flights land. For the local time, use the input format **hh:mm** (hh = 0-24, mm = 0-60), and output format "**hh:mm**". (Please note the quotations marks " ").

Hint: San Francisco: GMT-8, Japan: GMT+9, England: GMT+0, Taiwan: GMT+8

```
Enter the Local Time:11:37
Enter the flight duration to SanFrancisco(unit:minutes):78
SanFrancisco:"20:55"
Enter the flight duration to Japan(unit:minutes):569
Japan:"22:06"
Enter the flight duration to England(unit:minutes):145
England:"06:02"
請按任意鍵繼續 - - - _
```