2019. 8. 2. PLMS





시작 일시	2018-10-29, 19:03:22
진행 상황	종료됨
완료 일시	2018-10-29, 19:34:57
소요시간	31 분 35 초
성적	최고 100.00점 중 100.00 점

문제 1

풀이 완료 총 10.00 점에서 10.00 점 할당 We want to get the same execution results by replacing the nested "ifelse" statements in the source code below with a switch" statement.

Write and submit your source code using "switch" instead of "if-else".

```
#include <stdio.h>
int main(void)
{
    char marriage_code;
    scanf("%c",&marriage_code);
    if (marriage_code == 'M')
        printf("\nIndividual is married.");
    else if (marriage_code == 'S')
        printf("\nIndividual is single.");
    else if (marriage_code == 'D')
        printf("\nIndividual is divorced.");
    else if (marriage_code == 'W')
        printf("\nIndividual is widowed.");
   else
        printf("\nAn invalid code is entered.");
    return 0;
}
```

```
#include(stdio.h)

int main(){

char marriage_code;
scanf("%c",&marriage_code);

switch(marriage_code){

case 'M''

201824602_1.c
```

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문제 **2** 풀이 완료 총 15.00 점에서 15.00 점 할당

Complete the source code below properly that gets the following execution results when the user input are 2 3 7 and 1 3 6.

Execution Result #1

```
Input three integers: 2 3 7
Twice the sum of your integers plus 7 is 31 --- bye!
```

Execution Result #2

```
Input three integers: 1 3 6
Twice the sum of your integers plus 7 is 27 --- bye!
```

```
#include <stdio.h>
int main(void)
{
   int a, b, c, sum;
   printf("Input three integers: ");

   // Enter your code
   return 0;
}
```

```
printf("Input three integers: ");
    scanf("%d%d%d",&a,&b,&c);
    sum = 2*(a+b+c)+7;
    printf("Twice the sum of your integers plus
    return 0;
    201824602_2.c
```

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문제 3

풀이 완료

총 15.00 점에서 15.00 점 할당

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It is known that the temperature "C" in celsius has the following relation with the temperature "F" in fahrenheit.

$$C=rac{5}{9}\cdot (F-32)$$

The following source code, which is written to convert a temperature in fahrenheit to one in celsius, has a logic error. Modify the following source code to get that work properly.

Write and submit the source code of your main() function.

```
#include <stdio.h>
int main(void)
   int nC, nF;
   printf("Enter Fahrenheit temperature:\n");
   scanf("%d",&nF);
   nC = 5/9 * nF - 32;
   printf("%d degrees Fahrenheit is %d degrees Celsiu
s.\n", nF, nC);
   return 0;
}
```

```
#include <stdio.h>
 int main(void)
     float nC, nF;
     printf("Enter Fahrenheit temperature:\n");
     scanf("%f",&nF);
     nC = 5.0/9.0 * (nF - 32);
201824602_3.c
```

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문제 4

풀이 완료 총 20.00 점에서 20.00 점 할당 Complete a program that gets a date in the "mm/dd/yyyy" format from user input and prints it out in the "yyyy-mm-dd" format as shown in the following execution results.

You can assume that user input dates are always valid, that is, no validity check for the user input is necessary.

Execution Result

Enter a date (mm/dd/yyyy): 10/29/2018 You entered the date 2018-10-29

```
#include<stdio.h>

int main() {
    int mon, date, year;
    printf("Enter a date (mm/dd/yyyy): ");

    scanf("%d/%d/%d", &mon, &date, &year);
    while(!(mon>=1 && mon<=12 && date>=1 && date
201824602_4.c
```

댓글:

문제 5

풀이 완료 총 20.00 점에서 20.00 점 할당 Complete the function "GCD()" in the source code below that returns the Greatest Common Divisor of two integers given as the parameter a and b.

Write and submit your GCD() function.

```
#include <stdio.h>
/* Get and return the GCD of integer a and b */
int GCD(int a, int b) {
    // Enter your code
}

int main(void) {
    int a, b;
    printf("Enter two positive integers\n");
    scanf("%d%d",&a,&b);
    printf("GCD of (%d,%d) is %d\n",a,b,GCD(a,b));
    return 0;
}
```

```
#include <stdio.h>
/* Get and return the GCD of integer a and b */
int GCD(int a, int b) {
   int temp;
   if(a<b) {
       return GCD(b,a);
   }
   if(b == 0) {
       return a;
}
201824602_5.c</pre>
```

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문제 **6** 풀이 완료 총 20.00 점에서

20.00 점 할당

Complete the following source code to build a program that outputs the sum of all integer in the given CSV(Comma Separated Values) string. For example, if the CSV string is "123, 456, 789", the result is 1368(=123+456+789). You can safely assume that all values are positive integers. However, you should not assume that the CSV string is fixed as shown in the following source code. That is, your source code should work correctly even if the CSV string is initialized differently.

Write and submit the source code of your main() function.