

## 1. problem1.c

### <코드>

```
C problem1.c > main()
1  #include <stdio.h>
2
3  void change(float dollar, int *quarters, int *dimes, int *nickels, int *pennies)
4  {
5      int coin = dollar * 100;
6      *quarters = coin / 25;
7      *dimes = coin % 25 / 10;
8      *nickels = coin % 25 % 10 / 5;
9      *pennies = coin % 25 % 10 % 5;
10 }
11
12 int main()
13 {
14     float dollar;
15     int quarters, dimes, nickels, pennies;
16     printf("Enter your dollar :");
17     scanf("%f", &dollar);
18     printf("\n");
19     change(dollar, &quarters, &dimes, &nickels, &pennies);
20     printf("quarters : %d\ndimes : %d\nnickels : %d\npennies : %d", quarters, dimes, nickels, pennies);
21
22     return 0;
23 }
```

### <실행화면>

```
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> & 'c:\U
Adapters\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-skkqr
MIEngine-Error-bmbi3skd.kbp' '--pid=Microsoft-MIEngine-Pid-grvmfc2z.kma' '-
Enter your dollar : 2.33

quarters : 9
dimes : 0
nickels : 1
pennies : 3
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> █
```

## 2a. problem2a.c

### <코드>

```
C problem2a.c > ...
1  #include <stdio.h>
2
3  int secs(int hours, int minutes, int seconds)
4  {
5      int totalNumber;
6      minutes += hours * 60;
7      seconds += minutes * 60;
8      totalNumber = seconds;
9      return totalNumber;
10 }
11
12 int main()
13 {
14     printf("%d초", secs(1, 10, 2)); // 1시간10분2초 == 4202초
15 }
16
```

### <실행화면>

```
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4>
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> & 'c:\Use
s\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-pwls3ms4.qps'
-44dnukch.hxm' '--pid=Microsoft-MIEngine-Pid-z2rgn5dc.qyn' '--dbgExe=C:\msys6
4202초
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> █
```

## 2b. problem2b.c

### <코드>

```
C problem2b.c > main()
1  #include <stdio.h>
2
3  int secs(int *tot, int hours, int minutes, int seconds)
4  {
5      minutes += hours * 60;
6      seconds += minutes * 60;
7      *tot = seconds;
8  }
9
10 int main()
11 {
12     int totSec;
13     secs(&totSec, 1, 10, 2); // 1시간10분2초 == 4202초
14     printf("%d초", totSec);
15 }
16
```

### <실행화면>

```
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> & 'c:\Users\jinyoung\.vscode\extensions\ms-
s\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-ezduhouo.40j' '--stdout=Microsoft-MIEngine-Out-
-fw3j2gni.qej' '--pid=Microsoft-MIEngine-Pid-am5m3hrv.pwt' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--interpret
4202초
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4>
```

### 3. problem3.c

#### <코드>

```
C problem3.c > ...
1  #include <stdio.h>
2
3  void liquid(int totalCups, int *gallons, int *quarts, int *pints, int *cups)
4  {
5      *gallons = totalCups / 16;
6      totalCups %= 16;
7      *quarts = totalCups / 4;
8      totalCups %= 4;
9      *pints = totalCups / 2;
10     *cups = totalCups % 2;
11 }
12
13 int main()
14 {
15     int totalCups = 100;
16     int gallons, quarts, pints, cups;
17     liquid(totalCups, &gallons, &quarts, &pints, &cups);
18     printf("Gallons : %d , Quarts : %d , Pints : %d , Cups : %d", gallons, quarts, pints, cups);
19 }
20
```

#### <실행화면>

```
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> & 'c:\Users\jinyoung\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-wdadm1j5.asv' '--stdout=Microsoft-MIEngine-Out-wdadm1j5.asv' --r4iisct1.bdn' '--pid=Microsoft-MIEngine-Pid-ipdgfgpw.tvs' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe'
Gallons : 6 , Quarts : 1 , Pints : 0 , Cups : 0
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> █
```

#### 4. problem4.c

##### <코드>

```
C problem4.c > ...
1  #include <stdio.h>
2
3  void show(double rates[])
4  {
5      for (int i = 0; i < 9; i++)
6      {
7          printf("%.1f ", rates[i]);
8      }
9  }
10
11 int main()
12 {
13     double rates[] = {6.5, 8.2, 8.5, 8.3, 8.6, 9.4, 9.6, 9.8, 10.0};
14
15     show(rates);
16
17     return 0;
18 }
19 |
```

##### <실행화면>

```
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> & 'c:\Users\jinyoung\.vscode\extensions\Microsoft-vscode-vscode\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-pjdllylw.1g3' '--stdout=Microsoft-MIEngine-Error-qde44oeg.lnf' '--pid=Microsoft-MIEngine-Pid-u5b05bxu.nrq' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe'
6.5 8.2 8.5 8.3 8.6 9.4 9.6 9.8 10.0
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4>
```

## 5. problem5.c

### <코드>

```
C problem5.c > extent(double [], double [], double [])
1  #include <stdio.h>
2
3  void extent(double price[], double quantity[], double amount[])
4  {
5      for (int i = 0; i < 10; i++)
6      {
7          amount[i] = price[i] * quantity[i];
8      }
9  }
10
11 int main()
12 {
13     double price[10] = {10.62, 14.89, 13.21, 16.55, 18.62, 9.47, 6.58, 18.32, 12.15, 3.98};
14     double quantity[10] = {4, 8.5, 6, 8.35, 9, 15.3, 3, 5.4, 2.9, 4.8};
15     double amount[10];
16     extent(price, quantity, amount);
17     for (int i = 0; i < 10; i++)
18     {
19         printf("%f ", amount[i]);
20     }
21 }
```

### <실행화면>

```
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4> & 'c:\Users\jinyoung\.vscode\extensions\ms-vscode
Adapters\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-fglsowa2.2pd' '--stdout=Microsoft-MIEngine-Out-
MIEngine-Error-cue1rb1p.uqm' '--pid=Microsoft-MIEngine-Pid-v41a1y3e.451' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--i
42.480000 126.565000 79.260000 138.192500 167.580000 144.891000 19.740000 98.928000 35.235000 19.104000
PS C:\Users\jinyoung\OneDrive\gachon\1_2\problemSoving\code\week4>
```