

Program 1

```
evelyn luob lab1.cpp × ×  
[e] evelyn luob lab1  
(Global Scope) main()  
  
1 // created by Evelyn Luo  
2 // September 17, 2024  
3 // lab 1  
4  
5 #include <iostream>  
6  
7 int main()  
8 {  
9     //Program 1 Callendar  
10    printf("\n-----\n");  
11    printf("|t|t|t|t|t|t|t|t|\n");  
12    printf("      SEPTMEBER 2024|t|t|t|t|t|\n");  
13    printf("|t|t|t|t|t|t|t|t|\n");  
14    printf("\n-----\n");  
15    printf("MON       TUE        WED         THU          FRI           SAT            SUN\t|\n");  
16    printf("|t|t|t|t|t|t|t|t|\n");  
17    printf("\t1             2              3               4                5                 6                  7\t|\n");  
18    printf("|t|t|t|t|t|t|t|t|\n");  
19    printf("\t8             9              10              11               12                13               14 \t|\n");  
20    printf("|t|t|t|t|t|t|t|t|\n");  
21    printf("\t15            16              17              18               19                20               21 \t|\n");  
22    printf("|t|t|t|t|t|t|t|t|\n");  
23    printf("\t22            23              24              25               26                27               28 \t|\n");  
24    printf("|t|t|t|t|t|t|t|t|\n");  
25    printf("\t29            30                                  \t|\n");  
26    printf("|t|t|t|t|t|t|t|t|\n");  
27    printf("\n-----\n");  
28 }  
29
```

Output 1

The screenshot shows a Windows terminal window with a dark background. The title bar at the top reads "Microsoft Visual Studio Debug" followed by a close button and a plus sign. The terminal content is as follows:

```

SEPTMEBER 2024

MON    TUE    WED    THU    FRI    SAT    SUN
 1      2      3      4      5      6      7
 8      9     10     11     12     13     14
15     16     17     18     19     20     21
22     23     24     25     26     27     28
29     30

C:\Users\evelyn\source\repos\evelyn_luo_lab1\x64\Debug\evelyn_luo_lab1.exe
(process 20720) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .

```

The screenshot displays the Microsoft Visual Studio IDE with the following components:

- Source Code (C++):**

```

1  #include <iostream>
2
3
4
5
6
7  int main()
8  {
9      //Program 1 Calendar
10
11      printf("\n-----\n");
12      printf("|e|e|e|e|e|e|e|e|e|e|\n");
13      printf("|e|e|e|SEPTEMBER 2024|e|e|e|e|e|e|e|e|\n");
14      printf("|e|e|e|e|e|e|e|e|e|e|\n");
15      printf("\n-----\n");
16      printf("|MON|TUE|WED|THU|FRI|SAT|SUN|\n");
17      printf("|-----|");
18      printf("|1|2|3|4|5|6|7|\n");
19      printf("|e|e|e|e|e|e|e|e|e|e|\n");
20      printf("|18|9|10|11|12|13|14|\n");
21      printf("|e|e|e|e|e|e|e|e|e|e|\n");
22      printf("|15|16|17|18|19|20|21|\n");
23      printf("|e|e|e|e|e|e|e|e|e|e|\n");
24      printf("|22|23|24|25|26|27|28|\n");
25      printf("|e|e|e|e|e|e|e|e|e|e|\n");
26      printf("|29|30|\n");
27      printf("|e|e|e|e|e|e|e|e|e|e|\n");
28      printf("\n-----\n");
29
30
31  }
```
- Output Window:**

```

C:\Users\evelyn\source\repos\evelyn_luo_lab1\x64\Debug\evelyn_luo_lab1.exe
(process 19292) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools>Op
tions>Debugging>Automatically close the console when debugging stops.
Press any key to close this window...
```

Program 2.A

```
evelyn luo lab1.cpp  -+ X
+ evelyn luo lab1
1  // created by Evelyn Luo
2  // September 17, 2024
3  // lab 1
4
5  #include <iostream>
6
7  int main()
8  {
9      //program 2.A
10
11     int m = 7;
12     int n = 3;
13     int x = 4;
14     int y = 2;
15     int f;
16
17     f = (m + n)*(x - y);
18
19     printf("the answer is: %d\n", f);
20
21 }
```

Output 2.A

```
Microsoft Visual Studio Debug Console
+ - X
the answer is: 20

C:\Users\evelyn\source\repos\evelyn luo lab1\x64\Debug\evelyn luo lab1.exe (process 22596) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
evelyn luo lab1.cpp  -+ X
+ evelyn luo lab1
1  // created by Evelyn Luo
2  // September 17, 2024
3  // lab 1
4
5  #include <iostream>
6
7  int main()
8  {
9      //program 2.A
10
11     int m = 7;
12     int n = 3;
13     int x = 4;
14     int y = 2;
15     int f;
16
17     f = (m + n)*(x - y);
18
19     printf("the answer is: %d\n", f);
20
21 }
```

```
Microsoft Visual Studio Debug Console
+ - X
the answer is: 20

C:\Users\evelyn\source\repos\evelyn luo lab1\x64\Debug\evelyn luo lab1.exe (process 22596) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Program 2.B

```
evelyn_luo_lab1.cpp
evelyn_luo_lab1
(Global Scope)
1 // created by Evelyn Luo
2 // September 17, 2024
3 // Lab 1
4
5 #include <iostream>
6
7 int main()
8 {
9     //program 2.B
10
11     int m, n, x, y;
12     int f;
13     printf("Please enter four numbers: ");
14     scanf_s("%d %d %d %d", &m, &n, &x, &y);
15
16     f = (m + n)*(x - y);
17
18     printf("the answer is: %d", f);
19
20 }
21
```

Output 2.B

```
Microsoft Visual Studio Debug
Please enter four numbers: 3
4
5
6
the answer is: -7
C:\Users\evelyn\source\repos\evelyn_luo_lab1\x64\Debug\evelyn_luo_lab1.exe (process 22300) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
evelyn_luo_lab1.cpp
evelyn_luo_lab1
(Global Scope)
1 // created by Evelyn Luo
2 // September 17, 2024
3 // Lab 1
4
5 #include <iostream>
6
7 int main()
8 {
9     //program 2.B
10
11     int m, n, x, y;
12     int f;
13     printf("Please enter four numbers: ");
14     scanf_s("%d %d %d %d", &m, &n, &x, &y);
15
16     f = (m + n)*(x - y);
17
18     printf("the answer is: %d", f);
19
20 }
21
```

```
Microsoft Visual Studio Debug
Please enter four numbers: 3
4
5
6
the answer is: -7
C:\Users\evelyn\source\repos\evelyn_luo_lab1\x64\Debug\evelyn_luo_lab1.exe (process 22300) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Program 3

```
evelyn luo lab1.cpp* -# X
evelyn luo lab1 (Global Scope)
1 // created by Evelyn Luo
2 // September 17, 2024
3 // lab 1
4
5 #include <iostream>
6
7 int main()
8 {
9     //program 3
10
11     int rate, sales, cost, commission;
12
13     printf("\nPlease enter a rate: ");
14     scanf_s("%d", &rate);
15
16     printf("\nPlease enter a sales price: ");
17     scanf_s("%d", &sales);
18
19     printf("\nPlease enter a cost: ");
20     scanf_s("%d", &cost);
21
22     commission = rate * (sales - cost);
23
24     printf("The commision will be a value of: %d", commission);
25 }
```

Output 3

```
Microsoft Visual Studio Debug Console
Please enter a rate: 3
Please enter a sales price: 60
Please enter a cost: 30
The commision will be a value of: 90
C:\Users\evelyn\source\repos\evelyn luo lab1\x64\Debug\evelyn luo lab1.exe (process 23040) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
evelyn luo lab1.cpp* -# X
evelyn luo lab1 (Global Scope)
1 // created by Evelyn Luo
2 // September 17, 2024
3 // lab 1
4
5 #include <iostream>
6
7 int main()
8 {
9     //program 3
10
11     int rate, sales, cost, commission;
12
13     printf("\nPlease enter a rate: ");
14     scanf_s("%d", &rate);
15
16     printf("\nPlease enter a sales price: ");
17     scanf_s("%d", &sales);
18
19     printf("\nPlease enter a cost: ");
20     scanf_s("%d", &cost);
21
22     commission = rate * (sales - cost);
23
24     printf("The commision will be a value of: %d", commission);
25 }
```

```
Microsoft Visual Studio Debug Console
Please enter a rate: 3
Please enter a sales price: 60
Please enter a cost: 30
The commision will be a value of: 90
C:\Users\evelyn\source\repos\evelyn luo lab1\x64\Debug\evelyn luo lab1.exe (process 23040) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```