

```
1  #include <stdio.h>
2
3  int main() {
4      int A[2][2][2] = {
5          {{5, 8}, {3, 7}},
6          {{6, 4}, {9, 2}}
7      };
8
9      int B[2][2][2] = {
10         {{1, 3}, {2, 5}},
11         {{4, 1}, {3, 2}}
12     };
13
14     int C[2][2][2];
15
16     // Subtract both 3D matrices
17     for (int i = 0; i < 2; i++)
18         for (int j = 0; j < 2; j++)
19             for (int k = 0; k < 2; k++)
20                 C[i][j][k] = A[i][j][k] - B[i][j][k];
21
22     // Display result
23     printf("Resultant 3D Matrix (Subtraction):\n");
24     for (int i = 0; i < 2; i++) {
25         printf("Layer %d:\n", i + 1);
26         for (int j = 0; j < 2; j++) {
```

```
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14     int C[2][2][2];
15
16     // Subtract both 3D matrices
17     for (int i = 0; i < 2; i++)
18         for (int j = 0; j < 2; j++)
19             for (int k = 0; k < 2; k++)
20                 C[i][j][k] = A[i][j][k] - B[i][j][k];
21
22     // Display result
23     printf("Resultant 3D Matrix (Subtraction):\n");
24     for (int i = 0; i < 2; i++) {
25         printf("Layer %d:\n", i + 1);
26         for (int j = 0; j < 2; j++) {
27             for (int k = 0; k < 2; k++)
28                 printf("%d\t", C[i][j][k]);
29             printf("\n");
30         }
31         printf("\n");
32     }
33
34     return 0;
35 }
36
```

Resultant 3D Matrix (Subtraction):

Layer 1:

4	5
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1	2
---	---

Layer 2:

2	3
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6	0
---	---