

Problem 6: Multiply two 2d arrays and store the result in the 3rd one.

Code:

```
#include <stdio.h>

int main() {
    int a[2][2], b[2][2], c[2][2], i, j, k;
    printf("Enter first 2x2 matrix:\n");
    for(i=0;i<2;i++)
        for(j=0;j<2;j++)
            scanf("%d",&a[i][j]);

    printf("Enter second 2x2 matrix:\n");
    for(i=0;i<2;i++)
        for(j=0;j<2;j++)
            scanf("%d",&b[i][j]);

    for(i=0;i<2;i++) {
        for(j=0;j<2;j++) {
            c[i][j]=0;
            for(k=0;k<2;k++)
                c[i][j]+=a[i][k]*b[k][j];
        }
    }
```

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    }
}

printf("Product:\n");
for(i=0;i<2;i++){
    for(j=0;j<2;j++)
        printf("%d ",c[i][j]);
    printf("\n");
}
return 0;
}

```

Output:

Enter first 2x2 matrix:

12 15

67 58

Enter second 2x2 matrix:

35 89

23 67

Product:

765 2073

3679 9849