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1 #include <stdio.h>
2 #include <conio.h>
3
4 void main()
5 {
6     int a[10][10], b[10][10], c[10][10], sum[10][10], i, j, m, n, p, k;
7     printf("enter the no of rows in first matrix: ");
8     scanf("%d", &m);
9     printf("enter the the no of columns in first matrix and rows in Second matrix: ");
10    scanf("%d", &n);
11    printf("enter the no of columns in second matrix: ");
12    scanf("%d", &p);
13    printf("enter first matrix: ");
14    for (i = 0; i < m; i++)
15    {
16        for (j = 0; j < n; j++)
17            scanf("%d", &a[i][j]);
18    }
19    for (i = 0; i < m; i++)
20    {
21        for (j = 0; j < n; j++)
22            printf("%3d", a[i][j]);
23        printf("\n");
24    }
25    printf("enter second matrix: ");
26    for (i = 0; i < n; i++)
27    {
28        for (j = 0; j < p; j++)
29            scanf("%d", &b[i][j]);
30    }
31    for (i = 0; i < n; i++)
32    {
33        for (j = 0; j < p; j++)
34            printf("%3d", b[i][j]);
35        printf("\n");
36    }
37    for (i = 0; i < m; i++)
38    {
39        for (j = 0; j < p; j++)
40        {
41            sum[i][j] = 0;
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42            sum[i][j] = 0;
43            for (k = 0; k < n; k++)
44            {
45                c[i][j] = a[i][k] * b[k][j];
46                sum[i][j] = sum[i][j] + c[i][j];
47            }
48        }
49        printf("multiplication is \n");
50        for (i = 0; i < m; i++)
51        {
52            for (j = 0; j < p; j++)
53                printf("%3d", sum[i][j]);
54            printf("\n");
55        }
56        getch();
57    }
```

