Matrix multiplication:

```
#include <stdio.h>
int main()
{
  int m, n, p, q, c, d, k, sum = 0;
  int first[10][10], second[10][10], multiply[10][10];
  printf("Enter number of rows and columns of first matrix\n");
  scanf("%d%d", &m, &n);
  printf("Enter elements of first matrix\n");
  for (c = 0; c < m; c++)
    for (d = 0; d < n; d++)
      scanf("%d", &first[c][d]);
  printf("Enter number of rows and columns of second matrix\n");
  scanf("%d%d", &p, &q);
  if (n != p)
    printf("The multiplication isn't possible.\n");
  else
  {
    printf("Enter elements of second matrix\n");
    for (c = 0; c < p; c++)
      for (d = 0; d < q; d++)
        scanf("%d", &second[c][d]);
    for (c = 0; c < m; c++)
            {
      for (d = 0; d < q; d++)
              {
        for (k = 0; k < p; k++)
                        {
          sum = sum + first[c][k]*second[k][d];
        }
        multiply[c][d] = sum;
```

```
      sum = 0;
     }
    }
    printf("Product of the matrices:\n");
    for (c = 0; c < m; c++)
            {
     for (d = 0; d < q; d++)
       printf("%d\t", multiply[c][d]);
     printf("\n");
    }
  }
  return 0;
}
```