#include <stdio.h>

int main()

{

int matrix[3][3], i, j;

int sum = 0, product = 1;

printf("Enter 9 elements of 3x3 matrix:\n");

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

scanf("%d", &matrix[i][j]);

for (i = 0; i < 3; i++)

{

sum += matrix[i][2 - i];

product \*= matrix[i][2 - i];

}

printf("Sum of anti-diagonal: %d\n", sum);

printf("Product of anti-diagonal: %d\n", product);

return 0;

}

int main()

{

int matrix[3][3], i, j;

int sum = 0;

printf("Enter 9 elements of 3x3 matrix:\n");

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

scanf("%d", &matrix[i][j]);

for (i = 0; i < 3; i++)

for (j = i; j < 3; j++) // j starts from i

sum += matrix[i][j];

printf("Sum of upper triangle: %d\n", sum);

return 0;

}

#include <stdio.h>

int main()

{

int matrix[3][3], i, j;

int sum = 0;

printf("Enter 9 elements of 3x3 matrix:\n");

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

scanf("%d", &matrix[i][j]);

for (i = 0; i < 3; i++)

for (j = 0; j <= i; j++)

sum += matrix[i][j];

printf("Sum of lower triangle: %d\n", sum);

return 0;

}

#include <stdio.h>

int main()

{

int arr1[5], arr2[5], sum[5], i;

printf("Enter 5 elements of first array:\n");

for (i = 0; i < 5; i++)

scanf("%d", &arr1[i]);

printf("Enter 5 elements of second array:\n");

for (i = 0; i < 5; i++)

scanf("%d", &arr2[i]);

for (i = 0; i < 5; i++)

sum[i] = arr1[i] + arr2[i];

printf("Sum of two arrays: ");

for (i = 0; i < 5; i++)

printf("%d ", sum[i]);

return 0;

}

#include <stdio.h>

int main()

{

int mat1[3][3], mat2[3][3], result[3][3];

int i, j, k;

printf("Enter 9 elements of first matrix:\n");

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

scanf("%d", &mat1[i][j]);

printf("Enter 9 elements of second matrix:\n");

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

scanf("%d", &mat2[i][j]);

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

result[i][j] = 0;

for (i = 0; i < 3; i++)

for (j = 0; j < 3; j++)

for (k = 0; k < 3; k++)

result[i][j] += mat1[i][k] \* mat2[k][j];

printf("Result of matrix multiplication:\n");

for (i = 0; i < 3; i++)

{

for (j = 0; j < 3; j++)

printf("%d ", result[i][j]);

printf("\n");

}

return 0;

}