```c
//multiplyMatrices.c

#include <stdio.h>

// Function to multiply two matrices

void multiplyMatrices(int a[2][2], int b[2][2], int result[2][2]) {
    for (int i = 0; i < 2; i++) {
        for (int j = 0; j < 2; j++) {
            result[i][j] = 0;
            for (int k = 0; k < 2; k++) {
                result[i][j] += a[i][k] * b[k][j];
            }
        }
    }
}
```

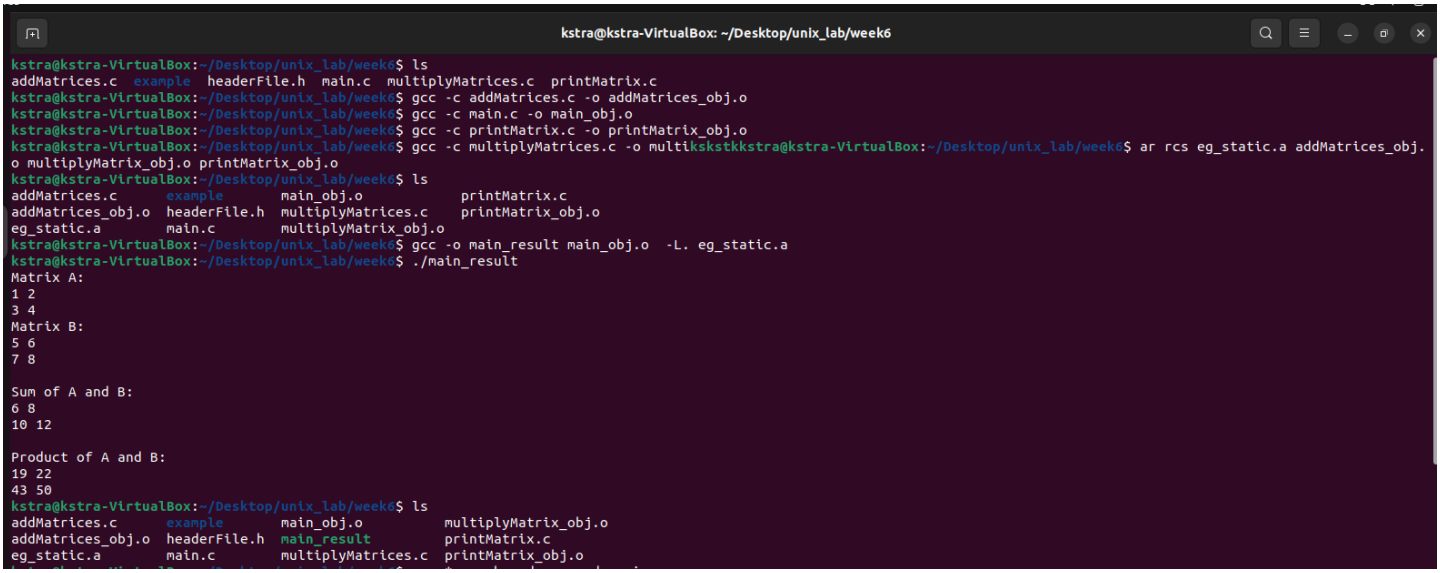
```c
//addMatrices.c

#include <stdio.h>

// Function to add two matrices
void addMatrices(int a[2][2], int b[2][2], int result[2][2]) {
    for (int i = 0; i < 2; i++) {
        for (int j = 0; j < 2; j++) {
            result[i][j] = a[i][j] + b[i][j];
        }
    }
}
```

```c
//printMatrix.c

#include <stdio.h>

// Function to print a matrix

void printMatrix(int matrix[2][2]) {
    for (int i = 0; i < 2; i++) {
        for (int j = 0; j < 2; j++) {
            printf("%d ", matrix[i][j]);
        }
        printf("\n");
    }
}
```

```c
//headerFile.h

void printMatrix(int matrix[2][2]);
void addMatrices(int a[2][2], int b[2][2], int result[2][2]);
void multiplyMatrices(int a[2][2], int b[2][2], int result[2][2]);
```

```c
//main.c

#include <stdio.h>
#include "headerFile.h"

int main() {
    int matrixA[2][2] = {{1, 2}, {3, 4}};
    int matrixB[2][2] = {{5, 6}, {7, 8}};
    int result[2][2];

    printf("Matrix A:\n");
    printMatrix(matrixA);

    printf("Matrix B:\n");
    printMatrix(matrixB);

    addMatrices(matrixA, matrixB, result);
    printf("\nSum of A and B:\n");
    printMatrix(result);

    multiplyMatrices(matrixA, matrixB, result);
    printf("\nProduct of A and B:\n");
    printMatrix(result);

    return 0;
}
```

STATIC LINKING:



DYNAMIC LINKING: