C:\Users\Debby\Documents\cpp\MatrixMult\testMatrixMult.cpp - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

MatrixMult.cpp | MatrixMult.h | testMatrixMult.cpp | trial.cpp | Matrix.cpp | Matrix.h | testMatrix.cpp

```cpp
#include <stdio.h>
#include "MatrixMult.h"

int main (){

    int data [10][10], data2 [10][10];
    int r, c, i, j, k, l;

    printf("Matrix Multiplier (Max Row & Column = 10)\n");
    printf("Enter rows of matrix : ");
    scanf("%i", &r);
    printf("Enter columns of matrix : ");
    scanf("%i", &c);

    printf("Enter matrix A (%ix%i): \n", r, c);
    for (i = 0; i < r; i++){
        for (j = 0; j < c; j++){
            printf("Element [%i][%i]: ", i, j);
            scanf("%i", &data[i][j]);
        }
    }
    printf("\n");

    printf("Enter matrix B (%ix%i): \n", c, r);
    for(k = 0; k < c; k++){
        for(l =0; l <r; l++){
            printf("Element [%i][%i]: ", l, k);
            scanf("%i", &data2[k][l]);
        }
    }

    MatrixMult m1;
    m1.setRow(r);
```

Line 23, Column 5 Tab Size: 4 C++

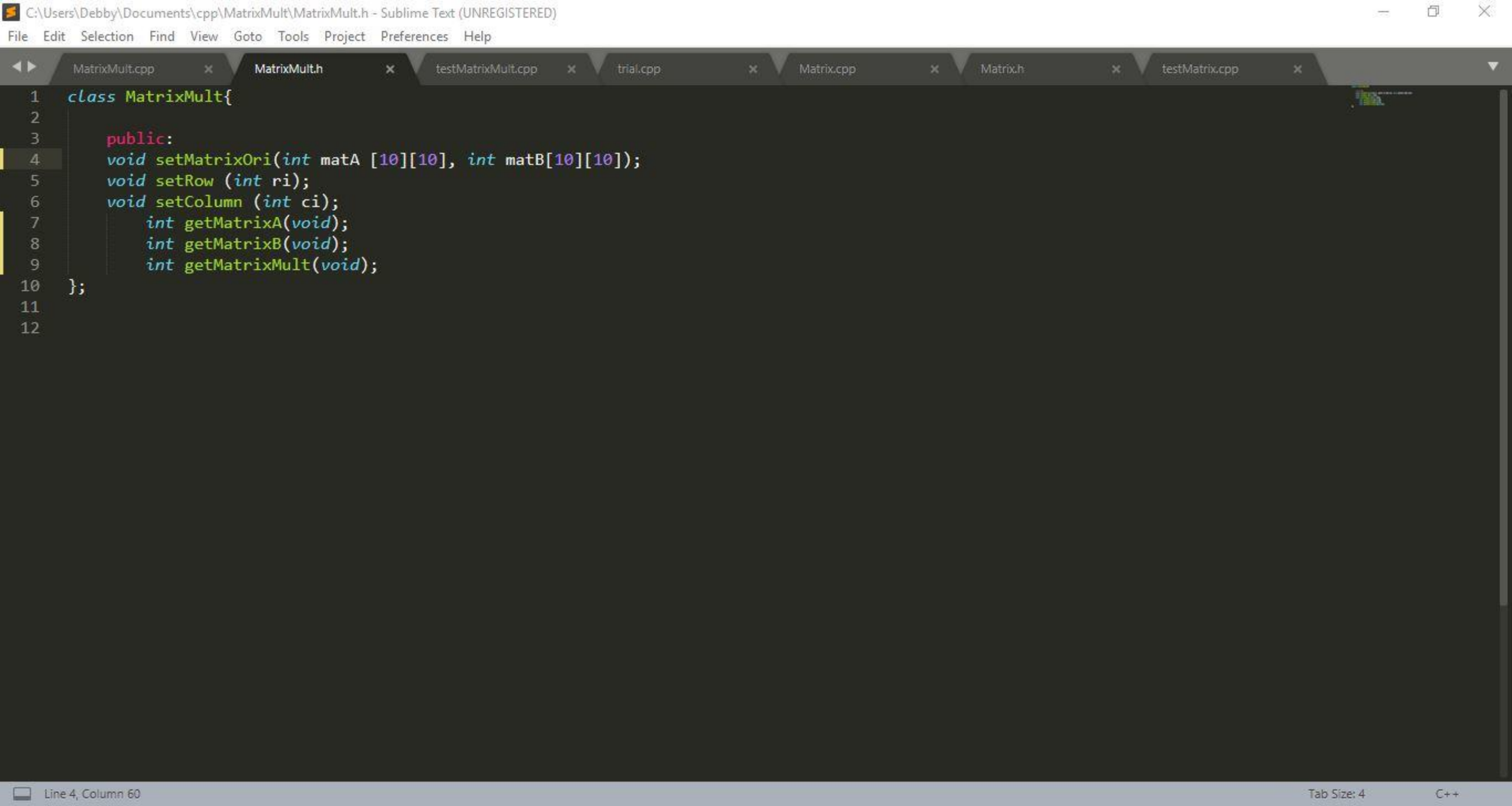
C:\Users\Debby\Documents\cpp\MatrixMult\testMatrixMult.cpp - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

MatrixMult.cpp | MatrixMult.h | testMatrixMult.cpp | trial.cpp | Matrix.cpp | Matrix.h | testMatrix.cpp

```
31
32      MatrixMult m1;
33      m1.setRow(r);
34      m1.setColumn(c);
35      m1.setMatrixOri (data, data2);
36      printf("\n");
37      printf("Matrix A\n");
38      printf("", m1.getMatrixA());
39      printf("Matrix B\n");
40      printf("", m1.getMatrixB());
41      printf("Matrix Mult\n");
42      printf("", m1.getMatrixMult());
43
44      return 0;
45  }
```

Line 23, Column 5 Tab Size: 4 C++


C:\Users\Debby\Documents\cpp\MatrixMult\MatrixMult.h - Sublime Text (UNREGISTERED)
File Edit Selection Find View Goto Tools Project Preferences Help
MatrixMult.cpp
MatrixMult.h
testMatrixMult.cpp
trial.cpp
Matrix.cpp
Matrix.h
testMatrix.cpp
class MatrixMult{
public:
void setMatrixOri(int matA [10][10], int matB[10][10]);
void setRow (int ri);
void setColumn (int ci);
int getMatrixA(void);
int getMatrixB(void);
int getMatrixMult(void);
};
Line 4, Column 60
Tab Size: 4
C++

C:\Users\Debby\Documents\cpp\MatrixMult\MatrixMult.cpp - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

MatrixMult.cpp | MatrixMult.h | testMatrixMult.cpp | trial.cpp | Matrix.cpp | Matrix.h | testMatrix.cpp

```cpp
#include "MatrixMult.h"
#include <stdio.h>

int mtxA[10][10], r, c, data;
int mtxB[10][10];
int C[10][10];

void MatrixMult::setRow (int ri){
    r = ri;
}

void MatrixMult::setColumn (int ci){
    c = ci;
}

void MatrixMult::setMatrixOri(int matA[10][10], int matB[10][10]){
    for (int d = 0; d < r ; d++){
        for (int k = 0; k < c; k++){
            mtxA[d][k] = matA[d][k];
            mtxB[k][d] = matB[k][d];
        }
    }
}

int MatrixMult::getMatrixA(){
    for (int p = 0; p < r ; p++){
        for (int k = 0; k < c; k++){
            printf("%i ", mtxA[p][k]);
        }

        printf("\n");
    }

```

Line 13, Column 12 Spaces: 4 C++

C:\Users\Debby\Documents\cpp\MatrixMult\MatrixMult.cpp - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

MatrixMult.cpp | MatrixMult.h | testMatrixMult.cpp | trial.cpp | Matrix.cpp | Matrix.h | testMatrix.cpp

```
24
25  int MatrixMult::getMatrixA(){
26      for (int p = 0; p < r ; p++){
27          for (int k = 0; k < c; k++){
28              printf("%i ", mtxA[p][k]);
29          }
30
31          printf("\n");
32      }
33
34      printf("\n");
35
36      return 0;
37  }
38
39  int MatrixMult::getMatrixB(){
40      for (int i = 0; i < c ; i++){
41          for (int j = 0; j < r; j++){
42              printf("%i ", mtxB[i][j]);
43          }
44
45          printf("\n");
46      }
47
48      printf("\n");
49
50      return 0;
51  }
52
53  int MatrixMult::getMatrixMult(){
54      for (int h = 0; h < r; h++){
55          for (int g = 0; g < r; g++){
56              for (int k = 0; k < c; k++){
```

Line 13, Column 12 Spaces: 4 C++

```cpp
int MatrixMult::getMatrixB(){
    for (int i = 0; i < c ; i++){
        for (int j = 0; j < r; j++){
            printf("%i ", mtxB[i][j]);
        }

        printf("\n");
    }

    printf("\n");

    return 0;
}

int MatrixMult::getMatrixMult(){
    for (int h = 0; h < r; h++){
        for (int g = 0; g < r; g++){
            for (int k = 0; k < c; k++){
                C[h][g] += mtxA[h][k] * mtxB[k][g];
            }

            printf("%i ", C[h][g]);
        }

        printf("\n");
    }

    return 0;
}

```

Command Prompt

```
C:\Users\Debby\Documents\cpp\MatrixMult>g++ testMatrixMult.cpp MatrixMult.cpp -o a

C:\Users\Debby\Documents\cpp\MatrixMult>a
Matrix Multiplier (Max Row & Column = 10)
Enter rows of matrix : 2
Enter columns of matrix : 3
Enter matrix A (2x3):
Element [0][0]: 1
Element [0][1]: 2
Element [0][2]: 3
Element [1][0]: 4
Element [1][1]: 5
Element [1][2]: 6

Enter matrix B (3x2):
Element [0][0]: 7
Element [1][0]: 8
Element [0][1]: 9
Element [1][1]: 10
Element [0][2]: 11
Element [1][2]: 12

Matrix A
1 2 3
4 5 6

Matrix B
7 8
9 10
11 12

Matrix Mult
58 64
139 154

C:\Users\Debby\Documents\cpp\MatrixMult>
```