Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int a[10][10], r, c, i, j;

    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);

    printf("Enter elements:\n");
    for (i = 0; i < r; i++)
        for (j = 0; j < c; j++)
            scanf("%d", &a[i][j]);

    printf("Matrix:\n");
    for (i = 0; i < r; i++) {
        for (j = 0; j < c; j++)
            printf("%d ", a[i][j]);
        printf("\n");
    }

    return 0;
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns: 2 3
Enter elements:
1 2 3 4 5 6
Matrix:
1 2 3
4 5 6
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int a[10][10], r, c, i, j, sum = 0;

    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);

    printf("Enter elements:\n");
    for (i = 0; i < r; i++)
        for (j = 0; j < c; j++)
            scanf("%d", &a[i][j]);

    for (i = 0; i < r; i++)
        for (j = 0; j < c; j++)
            sum += a[i][j];

    printf("Sum of elements: %d\n", sum);
    return 0;
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns: 2 3
Enter elements:
1 2 3 4 5 6
Sum of elements: 21
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int r, c, i, j;
    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);

    int a[r][c], rowSum[r];

    printf("Enter matrix:\n");
    for(i = 0; i < r; i++) {
        rowSum[i] = 0;
        for(j = 0; j < c; j++) {
            scanf("%d", &a[i][j]);
            rowSum[i] += a[i][j];
        }
    }

    printf("Row Sum Array:\n");
    for(i = 0; i < r; i++)
        printf("%d ", rowSum[i]);

    return 0;
}
```

PROBLEMS | OUTPUT | DEBUG CONSOLE | TERMINAL | PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns: 3 3
Enter matrix:
1 2 3 4 5 6 7 8 9
Row Sum Array:
6 15 24 %
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int r, c, i, j;
    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);

    int a[r][c], t[c][r];

    printf("Enter matrix:\n");
    for(i = 0; i < r; i++)
        for(j = 0; j < c; j++)
            scanf("%d", &a[i][j]);

    for(i = 0; i < r; i++)
        for(j = 0; j < c; j++)
            t[j][i] = a[i][j];

    printf("Transpose:\n");
    for(i = 0; i < c; i++) {
        for(j = 0; j < r; j++)
            printf("%d ", t[i][j]);
        printf("\n");
    }
    return 0;
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns: 2 3
Enter matrix:
1 2 3 4 5 6
Transpose:
1 4
2 5
3 6
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int r, c, i, j;
    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);

    int a[r][c], b[r][c], sum[r][c];

    printf("Enter Matrix A:\n");
    for(i = 0; i < r; i++)
        for(j = 0; j < c; j++)
            scanf("%d", &a[i][j]);

    printf("Enter Matrix B:\n");
    for(i = 0; i < r; i++)
        for(j = 0; j < c; j++)
            scanf("%d", &b[i][j]);

    printf("Sum Matrix:\n");
    for(i = 0; i < r; i++) {
        for(j = 0; j < c; j++) {
            sum[i][j] = a[i][j] + b[i][j];
            printf("%d ", sum[i][j]);
        }
        printf("\n");
    }
    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns: 2 2
Enter Matrix A:
1 2 3 4
Enter Matrix B:
5 6 7 8
Sum Matrix:
6 8
10 12
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int n, i, j, flag = 1;
    printf("Enter size of square matrix: ");
    scanf("%d", &n);

    int a[n][n];

    printf("Enter matrix:\n");
    for(i = 0; i < n; i++)
        for(j = 0; j < n; j++)
            scanf("%d", &a[i][j]);

    for(i = 0; i < n; i++)
        for(j = 0; j < n; j++)
            if(a[i][j] != a[j][i])
                flag = 0;

    if(flag)
        printf("Matrix is Symmetric");
    else
        printf("Matrix is NOT Symmetric");

    return 0;
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter size of square matrix: 3
Enter matrix:
1 2 3 2 5 6 3 6 9
Matrix is Symmetric
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int n, i, j, flag = 1;
    printf("Enter size of square matrix: ");
    scanf("%d", &n);

    int a[n][n];

    printf("Enter matrix:\n");
    for(i = 0; i < n; i++)
        for(j = 0; j < n; j++)
            scanf("%d", &a[i][j]);

    for(i = 0; i < n-1; i++)
        if(a[i][i] == a[i+1][i+1])
            flag = 0;

    if(flag)
        printf("Diagonal elements are distinct");
    else
        printf("Diagonal elements are NOT distinct");

    return 0;
}
```

Ports

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter size of square matrix: 3
Enter matrix:
5 1 2 3 6 7 8 9 8
Diagonal elements are distinct
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int n, i, j, sum = 0;
    printf("Enter size of square matrix: ");
    scanf("%d", &n);

    int a[n][n];

    printf("Enter matrix:\n");
    for(i = 0; i < n; i++)
        for(j = 0; j < n; j++)
            scanf("%d", &a[i][j]);

    for(i = 0; i < n; i++)
        sum += a[i][i];

    printf("Sum of diagonal = %d", sum);
    return 0;
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter size of square matrix: 3
Enter matrix:
1 2 3 4 5 6 7 8 9
Sum of diagonal = 15%
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int r, c, i, j;
    printf("Enter rows and columns: ");
    scanf("%d %d", &r, &c);

    int a[r][c];

    printf("Enter matrix:\n");
    for(i = 0; i < r; i++)
        for(j = 0; j < c; j++)
            scanf("%d", &a[i][j]);

    printf("Diagonal Traversal:\n");
    for(i = 0; i < r; i++)
        printf("%d ", a[i][i]);

    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns: 3 3
Enter matrix:
1 2 3 4 5 6 7 8 9
Diagonal Traversal:
1 5 9
rajatsingh@Rajats-MacBook-Air ~ %
```

Welcome | C C PROGRAMING PROJECT .c | C #include <stdio.h> Untitled-1 ●

```c
#include <stdio.h>

int main() {
    int r1, c1, r2, c2, i, j, k;

    printf("Enter rows and columns of Matrix A: ");
    scanf("%d %d", &r1, &c1);
    printf("Enter rows and columns of Matrix B: ");
    scanf("%d %d", &r2, &c2);

    if(c1 != r2) {
        printf("Matrix multiplication NOT possible.");
        return 0;
    }

    int a[r1][c1], b[r2][c2], m[r1][c2];

    printf("Enter Matrix A:\n");
    for(i = 0; i < r1; i++)
        for(j = 0; j < c1; j++)
            scanf("%d", &a[i][j]);

    printf("Enter Matrix B:\n");
    for(i = 0; i < r2; i++)
        for(j = 0; j < c2; j++)
            scanf("%d", &b[i][j]);

    for(i = 0; i < r1; i++)
        for(j = 0; j < c2; j++) {
            m[i][j] = 0;
            for(k = 0; k < c1; k++)
                m[i][j] += a[i][k] * b[k][j];
        }

    printf("Product Matrix:\n");
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Code

```
rajatsingh@Rajats-MacBook-Air ~ % cd "/Users/rajatsingh/" && gcc tempCodeRunnerFile.c -o tempCodeRunnerFile && "/Users/rajatsingh/"tempCodeRunnerFile
Enter rows and columns of Matrix A: 2 3
Enter rows and columns of Matrix B: 3 2
Enter Matrix A:
1 2 3 4 5 6
Enter Matrix B:
7 8 9 10 11 12
Product Matrix:
58 64
139 154
rajatsingh@Rajats-MacBook-Air ~ %
```