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**COURSE NAME: DATA STRUCTURES FOR MODERN COMPUTING SYSTEMS**

**COURSE CODE: CSA0302**

Experiment 1: 2D Matrix Add

Code:

```
#include <stdio.h>

int main() {
    int a[3][3] = {
        {1, 2, 3},
        {4, 5, 6},
        {7, 8, 9}
    };
    int b[3][3] = {
        {9, 8, 7},
        {6, 5, 4},
        {3, 2, 1}
    };
    int sum[3][3];
    int i, j;
    for (i = 0; i < 3; i++) {
        for (j = 0; j < 3; j++) {
            sum[i][j] = a[i][j] + b[i][j];
        }
    }
    printf("\nSum of the two matrices is:\n");
    for (i = 0; i < 3; i++) {
        for (j = 0; j < 3; j++) {
            printf("%d\t", sum[i][j]);
        }
        printf("\n");
    }
}
```

```
}  
    return 0;  
}
```

Output:

```
Sum of the two matrices is:
```

```
10  10  10
```

```
10  10  10
```

```
10  10  10
```

```
=== Code Execution Successful ===
```