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|  | **DEPARTMENT OF FIRST YEAR ENGINEERING** |

**Experiment No. 14**

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| Semester | F.E. Semester II – First Year Engineering |
| Subject | C Programming (FEL204) |
| Subject Professor In-charge | Prof. Sanjeev Dwivedi Sir |
| Assisting Teachers | Prof. Sneha Annappanavar |

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| Student Name | Deep Salunkhe |
| Roll Number | 21102A0014 |

**Title:**

**Program Code:**

#include<stdio.h>

void accept(int x[10][10],int m,int n)

{

    int i,j;

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        {

            printf("\nEnter Number:\n");

            scanf("%d",&x[i][j]);

        }

    }

}

void display(int x[10][10],int m,int n)

{

    int i,j;

    for(i=0;i<m;i++)

    {

        for(j=0;j<n;j++)

        {

            printf("%d  ",x[i][j]);

        }

        printf("\n");

    }

}

void multiply(int a[10][10],int b[10][10],int c[10][10],int m1,int n1,int m2,int n2)

{

    int i,j,k;

    for(i=0;i<m1;i++)

    {

        for(j=0;j<n2;j++)

        {

            c[i][j]=0;

            for(k=0;k<n1;k++)

            {

                c[i][j]=c[i][j]+a[i][k]\*b[k][j];

            }

        }

    }

}

int main()

{

    int a[10][10],b[10][10],c[10][10],m1,n1,m2,n2;

    printf("Enter number of rows and columns of matrix 1:\n");

    scanf("%d%d",&m1,&n1);

    printf("Enter number of rows and columns of matrix 2:\n");

    scanf("%d%d",&m2,&n2);

    if(n1==m2)

    {

        accept(a,m1,n1);

        display(a,m1,n1);

        accept(b,m2,n2);

        display(b,m2,n2);

        multiply(a,b,c,m1,n1,m2,n2);

        printf("\nMultiplication Matrix=\n");

        display(c,m1,n2);

    }

    else

    {

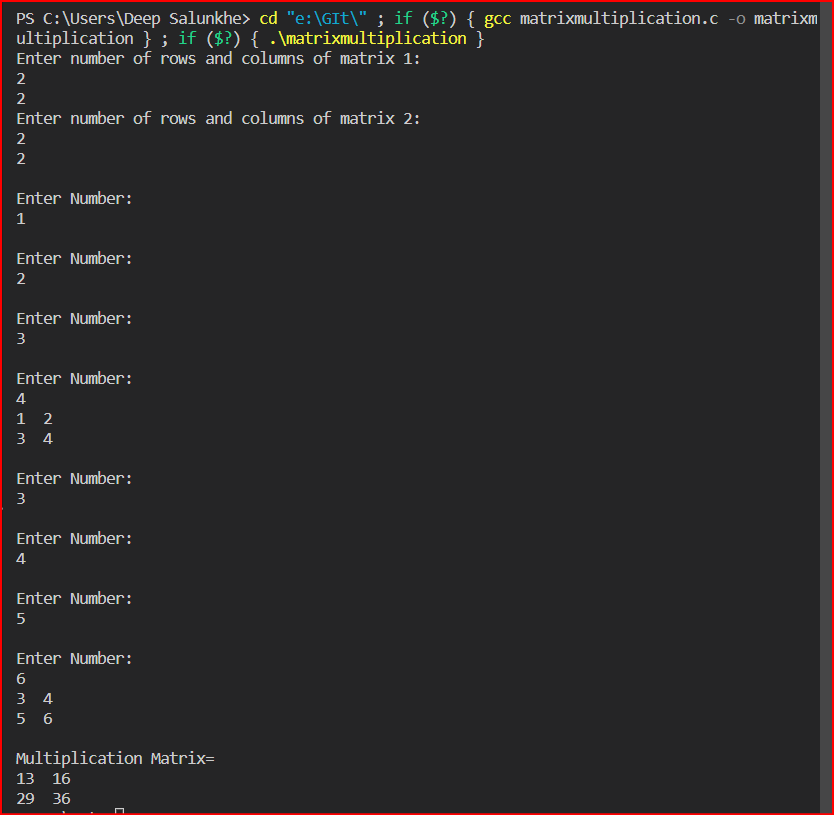
        printf("\nMultiplication of matrix is not possible");

    }

    return 0;

}

**Output:**

****