**Practical : 8**

**Code :**

#include<stdio.h>

#include<stdlib.h>

int main(){

int i,j,k,m1,n1,m2,n2;

printf("Enter the row and column for matrix1 : ");

scanf("%d%d", &m1,&n1);

int a[m1][n1];

printf("Enter the row and column for matrix2 : ");

scanf("%d%d", &m2,&n2);

int b[m2][n2];

if(n1==m2){

}

else{

printf("Error");

exit(1);

}

for(i=0;i<m1;i++){

for(j=0;j<n1;j++){

printf("Enter the element of a%d%d : ",i+1,j+1);

scanf("%d",&a[i][j]);

}

}

for(i=0;i<m2;i++){

for(j=0;j<n2;j++){

printf("Enter the element of b%d%d : ",i+1,j+1);

scanf("%d",&b[i][j]);

}

}

int c[m1][n2];

for(i=0;i<m1;i++){

for(j=0;j<n2;j++){

c[i][j] = 0 ;

}

}

printf("\nResultant matrix : \n");

for(i=0;i<m1;i++){

for(j=0;j<n2;j++){

for(k=0;k<n1;k++){

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

}

}

}

for(i=0;i<m1;i++){

for(j=0;j<n2;j++){

printf("%d\t",c[i][j]);

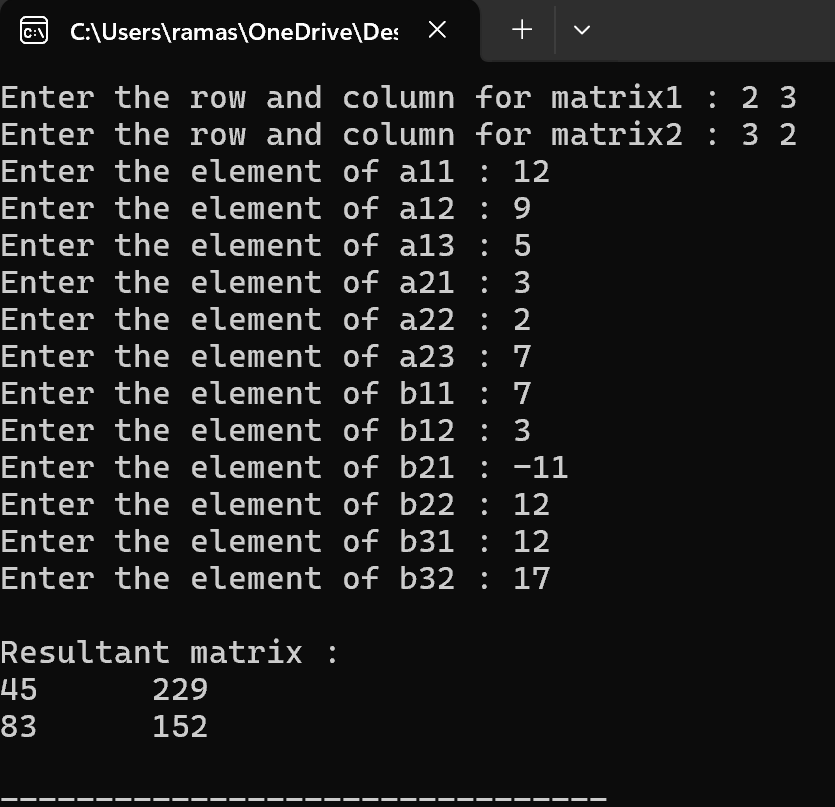
}

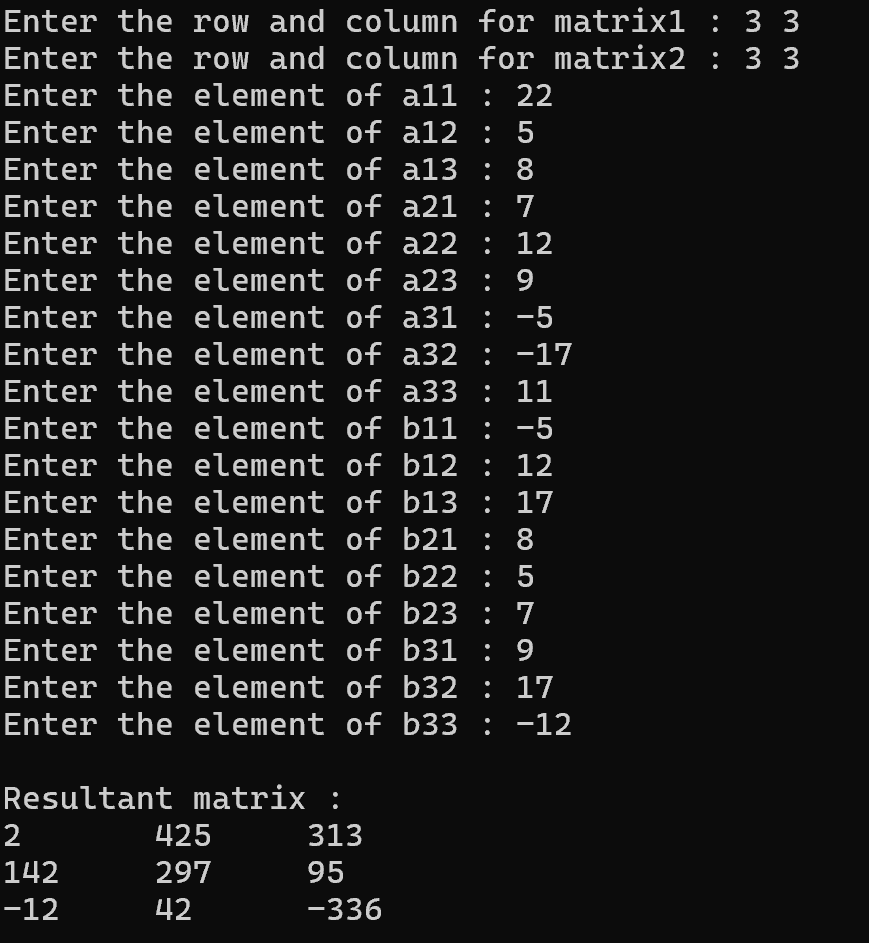
printf("\n");

}

}

**Output :**

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