#include <stdio.h>

/\* run this program using the console pauser or add your own getch, system("pause") or input loop \*/

int main(int argc, char \*argv[]) {

int fr,fc,sr,sc,gf,gs,i,a,rf=0,c;

printf("Enter the number of rows for the first matrix:");

scanf("%d",&fr);

printf("Enter the number of columns for the first matrix: ");

scanf("%d",&fc);

int f[fr][fc];

printf("Enter the number of rows for the second matrix:");

scanf("%d",&sr);

printf("Enter the number of columns for the second matrix:");

scanf("%d",&sc);

int s[fc][sr];

int result[100][100] = {0};

if(fc != sr){printf("Cant multiply Number of columns of the first matrix should be equal to the number of rows of the \n");}

else{

printf("Enter the elements of first matrix \n");

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

for(a = 0 ; a < fc; a++){

printf("Enter element [%d][%d]: ",i,a);

scanf("%d",&gf);

f[i][a] = gf;

}

}

printf("Enter the elements of second matrix \n");

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

for(a = 0 ; a < sc; a++){

printf("Enter element [%d][%d]: ",i,a);

scanf("%d",&gs);

s[i][a] = gs;

}

}

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

for(a = 0 ; a < fc; a++){

for(c= 0 ; c < sc ; c++){

result[i][c] += f[i][a] \* s[a][c];

}

}

}

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

for(c= 0 ; c < sc ; c++){

printf("%d ",result[i][c]);

if(c == sc-1 ){ printf("\n");}

}

}

}

return 0;

}