#include<stdio.h>

#ifndef \_MATR\_MUL\_KERNEL\_H\_

#define \_MATR\_MUL\_KERNEL\_H\_

#ifndef \_MATR\_TRANS\_KERNEL\_H\_

#define \_MATR\_TRANS\_KERNEL\_H\_

\_\_global\_\_

void matr\_mul(double \*M,double \*N,double \*P,int width1,int width2)

{int row=blockIdx.y\*blockDim.y+threadIdx.y;

int col=blockIdx.x\*blockDim.x+threadIdx.x;

if((row<width1)&&(col<width2))

{float Pvalue=0;

for(int k=0;k<256;k++)

{

Pvalue+= M[row\*256+k]\*N[k];

}

P[row\*256+col]=Pvalue;

}

}

\_\_global\_\_

void matr\_trans(double \*M,double \*N,int width1,int width2)

{int row=blockIdx.y\*blockDim.y+threadIdx.y;

int col=blockIdx.x\*blockDim.x+threadIdx.x;

if((row<width1)&&(col<width2))

{N[row\*250+col]=M[col\*256+row];

}

}

#endif // #ifndef \_MATRIXMUL\_KERNEL\_H\_

#endif // #ifndef \_MATRIXMUL\_KERNEL\_H\_