#include <stdio.h>

#include <stdlib.h>

#define MAX 100

void doc\_ma\_tran\_tu\_file(const char \*filename, int a[MAX][MAX], int \*n) {

FILE \*file = fopen(filename, "r");

if (file == NULL) {

printf("Khong the mo tep.\n");

exit(1);

}

fscanf(file, "%d", n);

for (int i = 0; i < \*n; i++) {

for (int j = 0; j < \*n; j++) {

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

}

}

fclose(file);

}

void xuat\_ma\_tran(int a[MAX][MAX], int n) {

printf("Ma tran vua doc:\n");

for (int i = 0; i < n; i++) {

for (int j = 0; j < n; j++) {

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

}

printf("\n");

}

}

int kiem\_tra\_doi\_xung(int a[MAX][MAX], int n) {

for (int i = 0; i < n; i++) {

for (int j = 0; j < n; j++) {

if (a[i][j] != a[j][i]) {

return 0;

}

}

}

return 1;

}

void xac\_dinh\_do\_thi(int a[MAX][MAX], int n) {

if (kiem\_tra\_doi\_xung(a, n)) {

printf("Ten: Don do thi vo huong\n");

} else {

printf("Ten: Don do thi co huong\n");

}

}

int main() {

int a[MAX][MAX];

int n;

doc\_ma\_tran\_tu\_file("matranbinhthuong.txt", a, &n);

xuat\_ma\_tran(a, n);

xac\_dinh\_do\_thi(a, n);

return 0;

}