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// Duyet do thi
// Duyet theo chieu Sau su dung hang doi(queue)
#include <stdio.h>
int mark[100];
// List
typedef struct {
    int data[100];
    int size;
} List;
void make_null_list(List* L) {
    L->size = 0;
}
void push_back(List* L, int x) {
    L->data[L->size] = x;
    ++L->size;
}
int element_at(List* L, int i) {
    return L->data[i - 1];
}
// Queue
typedef struct {
    int data[100];
    int front, rear;
} Queue;
void make_null_queue(Queue* Q) {
    Q \rightarrow front = 0;
    Q\rightarrowrear = -1;
}
void push(Queue* Q, int x) {
    ++Q->rear;
    Q \rightarrow data[Q \rightarrow rear] = x;
}
int top(Queue* Q) {
    return Q->data[Q->front];
}
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void pop(Queue* Q) {
    ++Q->front;
}
int empty(Queue* Q) {
    return Q->front > Q->rear;
}
// Graph
typedef struct {
    int A[100][100];
    int n;
} Graph;
void init_graph(Graph* G, int n) {
    G->n = n;
    int i, j;
    for (i = 1; i \le n; ++i) {
        for (j = 1; j <= n; ++j) {
            G->A[i][j] = 0;
        }
    }
}
void add_egde(Graph* G, int x, int y) {
    G\rightarrow A[x][y] = 1;
    G->A[y][x] = 1;
}
int adjacent(Graph* G, int x, int y) {
    return G->A[x][y];
}
List neighbors(Graph* G, int x) {
    int y;
    List list;
    make_null_list(&list);
    for (y = 1; y \leftarrow G->n; ++y) {
        if (adjacent(G, x, y)) {
             push back(&list, y);
         }
    }
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return list;
}
void breath_first_search(Graph* G, int start) {
    Queue frontier;
    make_null_queue(&frontier);
    push(&frontier, start);
    mark[start] = 1;
    while (!empty(&frontier)) {
        int x = top(&frontier);
        pop(&frontier);
        printf("%d\n", x);
        List list = neighbors(G, x);
        int j;
        for (j = 1; j <= list.size; ++j) {
            int y = element at(&list, j);
            if (!mark[y]) {
                mark[y] = 1;
                push(&frontier, y);
            }
        }
    }
}
int main() {
    //freopen("dt.txt", "r", stdin);
    Graph G;
    int n, m, i, j, x, y;
    scanf("%d%d", &n, &m);
    init_graph(&G, n);
    for (i = 1; i <= m; ++i) {
        scanf("%d%d", &x, &y);
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add_egde(&G, x, y);
}

for (i = 1; i <= n; ++i) {
    mark[i] = 0;
}

for (i = 1; i <= n; ++i) {
    if (!mark[i]) {
        breath_first_search(&G, i);
    }
}

return 0;
}</pre>
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