#include <stdio.h>

#include <string.h>

#define inf 1000000000

int e[50010][2];

int \*g[10010], deg[10010];

int c;

int low[10010], ind[10010];

void dfs(int p)

{

int i;

ind[p] = c++;

low[p] = inf;

for (i = deg[p]-1; i >= 0; i--)

{

if (ind[g[p][i]] == -1)

dfs(g[p][i]);

if (low[p] > low[g[p][i]])

low[p] = low[g[p][i]];

if (low[p] > ind[g[p][i]])

low[p] = ind[g[p][i]];

}

}

int main()

{

freopen("prom.in", "r", stdin);

freopen("prom.out", "w", stdout);

int n, m, i;

scanf("%d%d", &n, &m);

for (i = 0; i < m; i++)

{

scanf("%d%d", e[i], e[i]+1);

deg[--e[i][0]]++;

}

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

g[i] = new int[deg[i]+1];

memset(deg, 0, sizeof(deg));

for (i = 0; i < m; i++)

g[e[i][0]][deg[e[i][0]]++] = e[i][1]-1;

memset(low, -1, sizeof(low));

memset(ind, -1, sizeof(ind));

for (m = i = 0; i < n; i++)

if (ind[i] == -1)

{

c = 0;

dfs(i);

m += ind[i] == low[i];

}

printf("%d\n", m);

return 0;

}