**SENIOR DIVISION**

**JANE’S NUMBER SEQUENCE** **[MEDIUM]**

**Question Link:** <https://www.hackerrank.com/contests/codebash-2-0-senior/challenges/janes-number-sequence>

**Solution:** **(C++)**

#include <iostream>

#include <vector>

using namespace std;

int main()

{

int Z;

cin >> Z;

int num;

int k;

vector< vector<int> > c(10, vector<int> (10));

for(int i = 1; i <= Z; i++){

int r = i % 10;

int l;

int num = i;

while(num != 0){

k = num % 10;

num = num / 10;

}

l = k;

c[l][r]++;

}

long long total = 0;

for(int i = 0; i < 10; i++){

for(int j = 0; j < 10; j++){

total += c[i][j] \* c[j][i];

}

}

cout << total;

return 0;

}