HIMANSHI TYAGI

SANDWICH PROBLEM

#include <map>

#include <set>

#include <list>

#include <cmath>

#include <ctime>

#include <deque>

#include <queue>

#include <stack>

#include <string>

#include <bitset>

#include <cstdio>

#include <limits>

#include <vector>

#include <climits>

#include <cstring>

#include <cstdlib>

#include <fstream>

#include <numeric>

#include <sstream>

#include <iostream>

#include <algorithm>

#include <unordered\_map>

using namespace std;

int main() {

int t;

cin>>t;

while(t--){

int n,k,r,t,s;

cin>>n>>k;

s=n;

while(n>=k){

r=n/k;

t=n%k;

s=s+r;

n=r+t;

}

cout<<s<<endl;

}

/\* Enter your code here. Read input from STDIN. Print output to STDOUT \*/

return 0;

}