

PROBLEM 3.

Given is a group of  $N$  persons. Everybody is a friend of more than  $\lfloor N/2 \rfloor$  of the others and has no more than  $K$  enemies. One of the persons has a book that everybody would like to read and then to discuss it with some of the others.

Write a program that:

1. Finds out a way of handing around the book so that everyone gets it only once and passes it to a friend of his, and it returns to its owner at last.
2. Divides the persons into  $S$  subgroups for discussing the book. Everyone must have no more than  $P$  enemies in the subgroup he joins.

It is supposed that  $S \cdot P \geq K$ .