Problem. On the planet Sigma, robots excavate chunks of a very precious cristaline. These chunks can be divided into smaller part only on the Earth. Once a month, a spaceship comes to Sigma to bring cristaline to the Earth. The spaceship cannot take more than k pounds of the load. Naturally, it is desirable to take as much cristaline as the spaceship can.

(50 pts) Write an algorithm that will allow bringing the maximal amount of cristaline to the Earth. Prove that it is correct and estimate its time complexity.

(100 pts) Write an efficient algorithm that will allow bringing the maximal amount of cristaline to the Earth. Prove that it is correct and estimate its time complexity.