Problem 1

Jimmy's Lost His Marbles

Jimmy Joey Benn keeps losing his marbles, literally, not figuratively. Jimmy keeps his marbles in small bags, but he places these bags all over his house, and keeps forgetting where he places them. To solve his problem, Jimmy has bought a marble storage box where he can put his bags of marbles into.

Jimmy wants to store as many marbles as possible in the box, but he wants to keep the marbles in the bags. Jimmy is particular about his bags of marbles because his bags of marbles are sorted by colour, weight or design. All of Jimmy's marbles are of the same size. Your job is to help Jimmy place as many marbles, as he can, into his storage box.

The input file (**DATA11.txt** for the first submission and **DATA12.txt** for the second submission) will contain five sets of data. Each set will contain three lines of data. The first line will contain an integer, S, the maximum number of marbles that the storage box can hold. $1 <= S <= 32000$. The second line will contain an integer, B, the number of bags that Jimmy has. $1 <= B <= 12$. The third line will contain B single spaced integers, $N_1,..N_B$, the number of marbles in each of the B bags. $1 <= N_1..N_B <= 32000$.

The output file (**OUT11.txt** for the first submission and **OUT12.txt** for the second submission) will contain five lines of data, corresponding to each set of data in the input file. Each line will contain the maximum number of marbles that Jimmy can store in the storage box, while keeping them in their bags.

Sample Input (only three sets of data given)	Sample Output (only three lines given)
50 5 12 14 18 33 34 100 6 12 18 22 67 50 23 75 4 25 25 70 50	48 97 75