

## **1 2 Dimensional Knapsack Problem instances (2DKP):**

### **1.1 How to read instance files:**

Each instance file contains the following information in the given order:

- Number of binary decision variables;
- Right hand side value of the first constraint;
- Right hand side value of the second constraint;
- The first objective function coefficients;
- The second objective function coefficients;
- Weights of each decisions variable in the first constraint;
- Weights of each decision variable in the second constraint.

Both objective functions of a biobjective 2DKP should be maximized. However, the rectangle splitting method requires two minimization objectives. As a consequence, we have multiplied each objective function coefficient by -1 in our data files.

### **1.2 Results:**

The set of nondominated points are shown in each file. In each row, there are two numbers. The first number shows the first objective value and the second one shows the second objective value. Note that we report the original maximization objective values.

## **2 Assignment problem (AP):**

### **2.1 How to read instance files:**

Each instance file contains following information in the given order:

- Number of jobs (the total number of variables is equal to the number of jobs squared);
- The first objective function coefficients;
- The second objective function coefficients.

### **2.2 Results:**

The set of nondominated points are shown in each file. In each row, there are two numbers. The first number shows the first objective value and the second one shows the second objective value.