# Data Structure HW3

Using the Kruskal's algorithm to implement the minimal-cost spanning tree. To complete this homework assignment, you have to study the Kruskal's algorithm and use the method.

To test your program, we will give you a txt file. The file include all the (vertice, vertice,weight), for example : (0, 1, 28), (0, 5, 10), …… . It means that from 0 to 1 or 1 to 0 and it's weight is 28. For the output, show the edges you choose, include it's weight and total length.
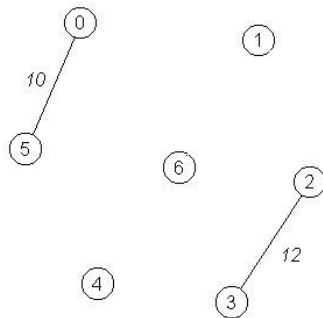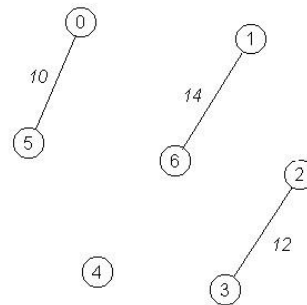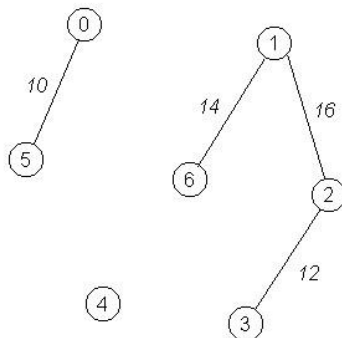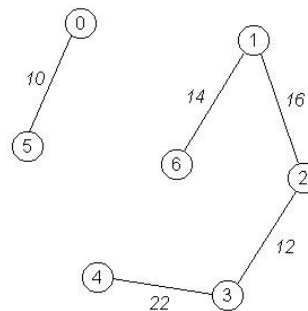
Kruskal algorithm
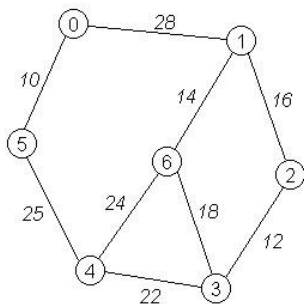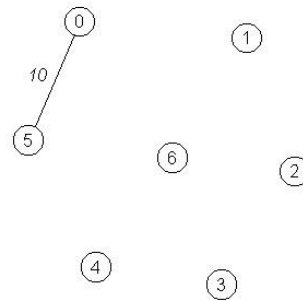
(a)
(b)

(b)
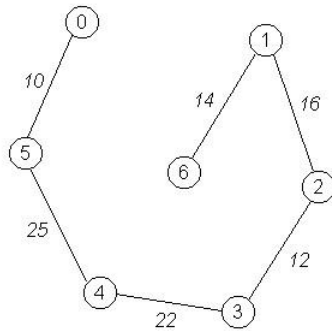(d)

(e)
(f)

(g)

Example for your input/output:

Input

test.txt

Output

0 5 10	From, to, weight
2 3 12	From, to, weight
1 6 14	From, to, weight
1 2 16	From, to, weight
3 4 22	From, to, weight
4 5 25	From, to, weight
99	Total length

Requirements

Program
I. You need to turn in the code.
II. Name your code file "hw3_StudenyID.c/cpp."
III. Your program must be readable (Ex. Comments, variable names, function names)\

Report (Name the file"hw3_StudentID.pdf")
I. Describe your implementation. (Ex: algorithm, program executing process)
II. No more than 2 pages.

Grading policy

I. Self-test(20%)

Run the testfile from e3 and record the result in your report.

II. extra-test(60%)

III. report(20%)

Submit (e3 will be closed on time)

Compress all your files (including your code and report.) Name your compressed file "studentID_hw3.rar"or "studentID_hw3.zip". Upload your compressed file to e3.

Deadline: 2017.01.16, 23:59

No late upload