This folder contains implementation of different algorithms; here is a list of files:

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| **File Name** | **Description** |
| algo\_base.h/cpp | Abstract class for inheritance |
| cascade.h/cpp | Abstract class for inheritance |
| common.h/cpp | Common definitions shared by source files |
| compatible.h/cpp | Compatibility check |
| event\_timer.h/cpp | Time account |
| general\_cascade.h/cpp | Implementation of GC model. |
| graph.h/cpp | Reading the graph data from standard input |
| graph\_basic.h/cpp | Abstract class for inheritance |
| greedy.h/cpp | Greedy algorithm, accelerated by CELF |
| mi\_command\_line.h/cpp | Basic command line functions |
| mi\_limit.h/cpp | Some parameters |
| mi\_random.h/cpp | Picking nodes randomly |
| mi\_util.h/cpp | Exception handlers |
| reverse\_general\_cascade.h/cpp | IC model on reversed graph |
| rr\_infl.h/cpp | Reverse propagation process |
| main.cpp | The main program, different algorithms are selected by switches.  (“windows.h” is included in this program) |

This program was run in Microsoft Visual Studio Community 2022 (Windows 64 bit) version 17.4.3.

运行时输入如下指令：

-rr1 < C:\Users\admin\Desktop\dm-wc.txt

-g < C:\Users\admin\Desktop\dm-wc.txt

得到四个文件：greedy.txt和time\_greedy.txt，分别是贪心算法得到的种子结点影响力和所花费的时间。

rr\_infl.txt和time\_rr\_infl.txt则分别是反向可达集算法得到的种子结点影响力和所花费的时间。