Progetto #6 – Human Desease Network (Clustering)

A network of disorders and disease genes linked by known disorder–gene associations offers a platform to explore in a single graph-theoretic framework all known phenotype and disease gene associations, indicating the common genetic origin of many diseases. Genes associated with similar disorders show both higher likelihood of physical interactions between their products and higher expression profiling similarity for their transcripts, supporting the existence of distinct disease-specific functional modules.

# Dataset

In the “human disease network” (HDN) nodes represent disorders, and two disorders are connected to each other if they share at least one gene in which mutations are associated with both disorders. The data comprises of the set of weighted edges and the set of nodes, with the correspondent disorder and disorder class.

*id,label,timeset,0,1*

*55,Deafness,,disease,"Ear,Nose,Throat"*

*47,Leukemia,,disease,Cancer*

*114,Colon cancer,,disease,Cancer*

*45,Retinitis pigmentosa,,disease,Ophthamological*

*87,Diabetes mellitus,,disease,Endocrine*

*54,Cardiomyopathy,,disease,Cardiovascular*

*81,Mental retardation,,disease,Neurological*

*48,Blood group,,disease,Hematological*