Multi-level modularity/Optimal (U&W)

# Group 1

|  |  |  |
| --- | --- | --- |
| BO | Bossuet | Bossuet (Lesgle), member, Friends of the ABC |
| CM | Combeferre | Combeferre, member, Friends of the ABC |
| CR | Courfeyrac | Courfeyrac, member, Friends of the ABC |
| EN | Enjolras | Enjolras, chief of Friends of the ABC |
| FE | Feuilly | Feuilly, member, Friends of the ABC |
| GA | Gavroche | Gavroche, son of the Thénardiers |
| GT | Grantaire | Grantaire, Friends of the ABC skeptic |
| GV | Government troops | Government troops |
| IW | Insurgent workers | Insurgent workers |
| JO | Joly | Joly, member Friends of the ABC |
| WA | Anonymous worker | Anonymous worker at barricade |

# Group 2

|  |  |  |
| --- | --- | --- |
| AZ | Azelma | Azelma, daughter of the Thénardiers |
| BQ | Basque | Basque, manservant to Gillenormand |
| BZ | Boulatruelle | Boulatruelle, former convict and road mender in Montfermeil |
| CJ | Javert's coachman | Coachman assisting Javert |
| CO | Cosette | Cosette, daughter of Fantine |
| CX | Concierge, Gillenormand | Concierge at Gillenormand |
| DG | Doctor, Gillenormand | Doctor at Gillenormand |
| EP | Eponine | Eponine, daughter of the Thénardiers |
| GI | M. Gillenormand | M. Gillenormand, Marius's grandfather |
| JA | Javert | Javert, police officer |
| JV | Jean Valjean | Jean Valjean |
| MA | Marius | Marius |
| MG | Mlle Gillenormand | Mlle Gillenormand, unmarried daughter of Gillenormand |
| NI | Nicolette | Nicolette, maid to Gillenormand |
| SW | Sewermen | Sewermen |
| TH | Thénardier | Thénardier, innkeeper in Montfermeil, aka Jondrette |

# Group 3

|  |  |  |
| --- | --- | --- |
| CY | Concierge, l'Homme Armé | Concierge at rue de l'Homme Armé |
| CZ | Concierge's husband | Husband of Concierge at rue de l'Homme Armé |
| DJ | Doctor, Valjean | Doctor to Valjean |

# Group 4

|  |  |  |
| --- | --- | --- |
| BX | Bourgeois man | Bourgeois man in Luxemburg gardens |
| BY | Bourgeois son | Bourgeois man's son |
| XA | Older child | Older Child, son of Thénardier, raised by Magnon |
| XB | Younger child | Younger Child, son of Thénardier, raised by Magnon |

Spin Glass (U/W)

The algorithm cannot work with **disconnected** graph.