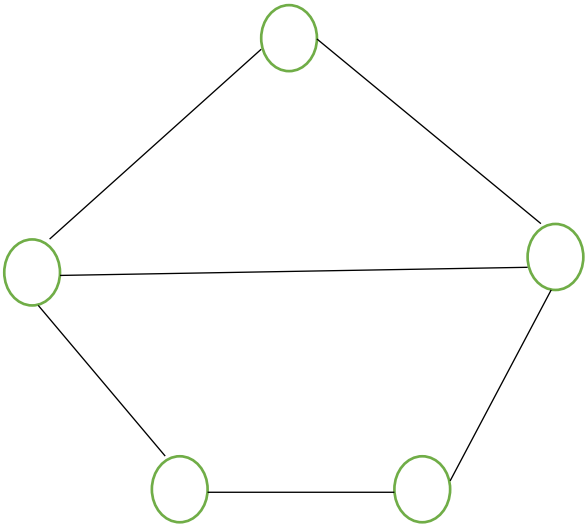
Graph 1

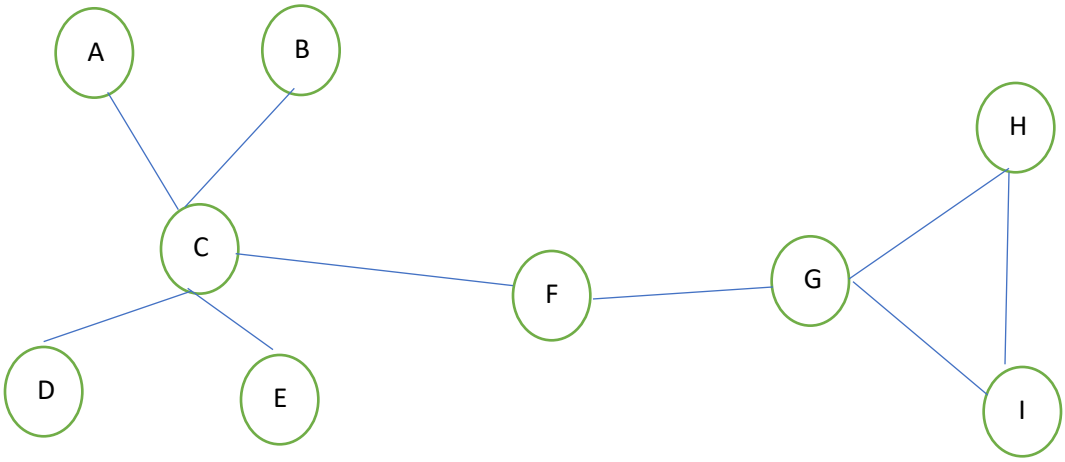


| | A | B | C | D | E | RM |
|---|---|---|---|---|---|---|
| A | 0 | 1 | 0 | 0 | 1 | 2 |
| B | 1 | 0 | 1 | 0 | 1 | 3 |
| C | 0 | 1 | 0 | 1 | 0 | 2 |
| D | 0 | 0 | 1 | 0 | 1 | 2 |
| E | 1 | 1 | 0 | 1 | 0 | 3 |
| CM | 2 | 3 | 2 | 2 | 3 | 0 |

RM = CM, they are both degree centrality for each actor/node in the graph

Density = 6/10 = 60%

Graph 2




| | A | B | C | D | E | F | G | H | I | RM |
|---|---|---|---|---|---|---|---|---|---|---|
| A | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| B | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| C | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 5 |
| D | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| E | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| F | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 |
| G | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 |
| H | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| I | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | --- |

$$density = \frac{9}{C_9^2} = \frac{9}{36} = 25\%$$

$$C_9^2 = \frac{9!}{2! \times (9-2)!} = \frac{9!}{2 \times 7!} = 36$$