

Let  $G$  be any graph but here I simply take weighted graphs

Let  $CN(u) = \text{closed Neighborhood degree sum that is } = (\sum_{v \in N(u)} d(v)) + d(u)$

$$N[1] = \sum_{(u,v) \in E(G)} \left[ \frac{CN(u) + CN(v)}{2} \right]$$

$$N[2] = \sum_{(u,v) \in E(G)} \left[ \frac{CN(u) * CN(v)}{2} \right]$$

$$N[3] = \sum_{(u,v) \in E(G)} \left[ \frac{CN(u) + CN(v)}{2} \right]^2$$

$$N[4] = \sum_{(u,v) \in E(G)} \left[ \frac{1}{\max \{CN(u), CN(v)\}} \right]$$

$$N[5] = \sum_{(u,v) \in E(G)} \left[ \frac{CN(u) * CN(v)}{CN(u) + CN(v)} \right]$$

$$N[6] = \sum_{(u,v) \in E(G)} \left[ \frac{2}{CN(u) + CN(v)} \right]$$

$$N[7] = \sum_{(u,v) \in E(G)} \left[ \frac{2}{CN(u) * CN(v)} \right]$$

$$N[8] = \sum_{(u,v) \in E(G)} \left[ \frac{2}{CN(u) + CN(v)} \right]^2$$

$$N[9] = \sum_{(u,v) \in E(G)} [\max \{CN(u), CN(v)\}]$$

$$N[10] = \sum_{(u,v) \in E(G)} \left[ \frac{CN(u) + CN(v)}{CN(u) * CN(v)} \right]$$