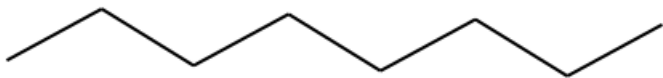
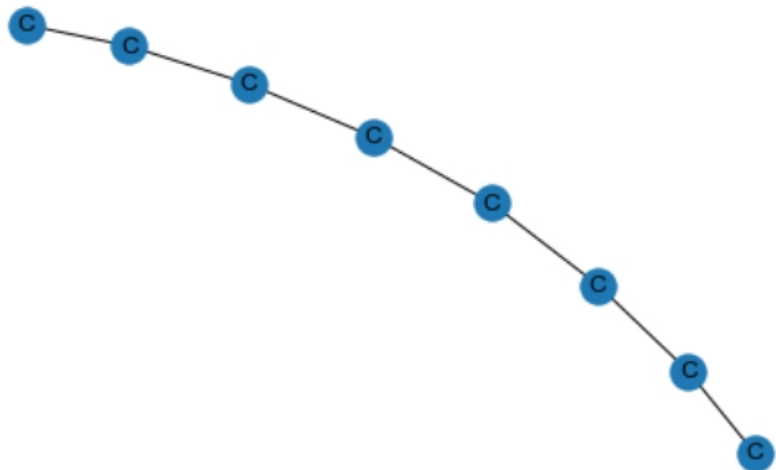


Chemical representation



Graph representation



[(0, 'C'), (1, 'C'), (2, 'C'), (3, 'C'), (4, 'C'), (5, 'C'), (6, 'C'), (7, 'C')]

Adjacency matrix

```
[[0. 1. 0. 0. 0. 0. 0. 0.]  
 [1. 0. 1. 0. 0. 0. 0. 0.]  
 [0. 1. 0. 1. 0. 0. 0. 0.]  
 [0. 0. 1. 0. 1. 0. 0. 0.]  
 [0. 0. 0. 1. 0. 1. 0. 0.]  
 [0. 0. 0. 0. 1. 0. 1. 0.]  
 [0. 0. 0. 0. 0. 1. 0. 1.]  
 [0. 0. 0. 0. 0. 0. 1. 0.]]
```

Wiener index vs alkane length

$$W(G) = \frac{1}{2} \sum_{u,v \in V(G)} d(u)d(v) \quad , \quad d(u) = \text{distance}$$

