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Roll No : 19C033

Exp No : 04

Batch No : 01

```
!pip install networkx
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/  
Requirement already satisfied: networkx in /usr/local/lib/python3.8/dist-packages (3.0)
```

```
import networkx
```

```
G = networkx.Graph()
```

```
G.add_node(1)
```

```
G.add_node(2)
```

```
G.add_node(3)
```

```
G.add_node(4)
```

```
G.add_node(5)
```

```
G.nodes()
```

```
NodeView((1, 2, 3, 4, 5))
```

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```
G.add_edge(1,2)
```

```
G.add_edge(1,3)
```

```
G.add_edge(4,3)
```

```
G.add_edge(4,3)
```

```
G.add_edge(5,4)
```

```
G.add_edge(2,3)
```

```
G.edges()
```

```
EdgeView([(1, 2), (1, 3), (2, 3), (3, 4), (4, 5)])
```

```
import networkx as nx
```

```
G = nx.Graph()
```

```
G.nodes()
```

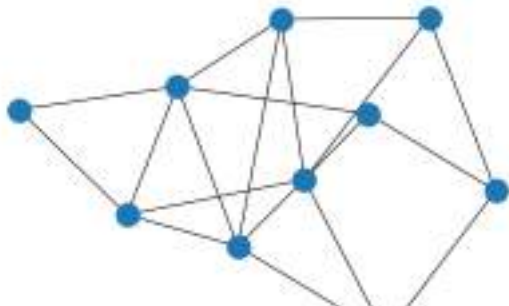
```
G.edges()
```

```
EdgeView([])
```

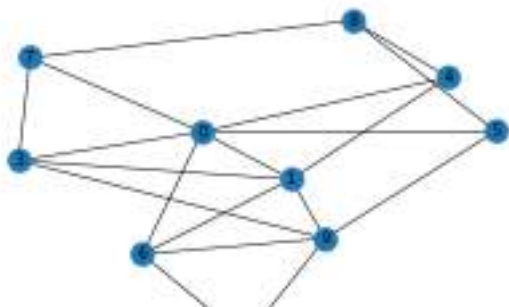
```
import matplotlib.pyplot as plt
```

```
nx.draw(G)
```

```
plt.show()
```



```
nx.draw(G,with_labels=1)  
plt.show()
```



```
G = nx.gnp_random_graph(10,0.5)
```

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