

Add Attributes to the Node

```
In [ ]: import networkx as nx
# The following line initializes two empty directed graph objects
G=nx.DiGraph()
```

```
In [47]: G.add_node('abc', dob=1185, pob='usa', dayob='monday')
G.add_node('def', dob=1185, pob='usa', dayob='sunday')
```

```
In [54]: for n,d in G.nodes() (data=True):
          print(n,d['dob'],d['pob'],d['dayob'])

abc 1185 usa monday
def 1185 usa monday
```

Update the attributes

```
In [56]: for n,d in G.nodes() (data=True):
          d['pob']=d['pob'] + ' xx'
```

```
In [57]: for n,d in G.nodes() (data=True):
          print(n,d['dob'],d['pob'],d['dayob'])
```

```
abc 1185 usa xx monday
def 1185 usa xx monday
```

Add Objects to the Node

```
In [33]: import networkx as nx
G1=nx.DiGraph()
class Person:
    def __init__(self, name, age):
        self.name = name
        self.age = age

p1 = Person("John", 36)
p2 = Person("Smith", 46)
p3 = Person("Brown", 30)

G1.add_node(1,data=p1)
G1.add_node(2,data=p2)
G1.add_node(3,data=p3)
print(G1.nodes())
print(G1.number_of_nodes())
```

```
John
[1, 2, 3]
3
```

```
In [39]: for n,d in G1.nodes(data=True):
        print(d['data'].name, ' ',d['data'].age)
```

```
John    36
Smith   46
Brown   30
```

Remove Node

```
In [41]: G1.remove_node(1)

for n,d in G1.nodes(data=True):
    print(d['data'].name, ' ',d['data'].age)
```

```
Smith    46
Brown    30
```

Update Node

```
In [42]: for n,d in G1.nodes(data=True):
        d['data'].name = 'XX'
        d['data'].age = 0
```

```
In [43]: for n,d in G1.nodes(data=True):
        print(d['data'].name, ' ',d['data'].age)
```

```
XX    0
XX    0
```

```
In [ ]:
```

