In [1]:
```
from pulp import *
```

In [13]:
```
prob = LpProblem("Simple LP problem",LpMaximize)
x12= LpVariable("x12",lowBound=0,upBound=6)
x13= LpVariable("x13",lowBound=0,upBound=4)
x24= LpVariable("x24",lowBound=0,upBound=3)
x25= LpVariable("x25",lowBound=0,upBound=2)
x34= LpVariable("x34",lowBound=0,upBound=2)
x35= LpVariable("x35",lowBound=0,upBound=5)
x46= LpVariable("x46",lowBound=0,upBound=6)
x56= LpVariable("x56",lowBound=0,upBound=4)
x61= LpVariable("x61",lowBound=0)
```

```
C:\Users\acer\anaconda3\Lib\site-packages\pulp\pulp.py:1316: UserWarning: Spa
ces are not permitted in the name. Converted to '_'
  warnings.warn("Spaces are not permitted in the name. Converted to '_'")
```

In [14]:
```
prob+=+x61
```

In [15]:
```
prob+=+x61 - x12 - x13 == 0
prob+=+x12 - x24 - x25 == 0
prob+=+x13 - x34 - x35 ==0
prob+=+x24 + x34 - x46 == 0
prob+=+x25 + x35 - x56 == 0
prob+=+x46 + x56 - x61 == 0
```

In [16]:
```
prob.solve()
```

Out[16]: 1

In [17]:
```
for v in prob.variables():
    print(v.name,"m",v.varValue)
```

```
x12 m 5.0
x13 m 4.0
x24 m 3.0
x25 m 2.0
x34 m 2.0
x35 m 2.0
x46 m 5.0
x56 m 4.0
x61 m 9.0
```

In [18]:
```
print("The optimal value is :",value(prob.objective))
```

```
The optimal value is : 9.0
```

In [ ]: