In [7]:
```python
!pip install pulp
```

Requirement already satisfied: pulp in c:\users\rohit\anaconda3\lib\site-packages (2.7.0)

In [4]:
```python
from pulp import LpVariable, LpProblem, LpMaximize, LpStatus, value, LpMinimize

# Delcaring variables

x1 = LpVariable("x1",lowBound=0)
x2 = LpVariable("x2",lowBound=0)
x3 = LpVariable("x3",lowBound=0)
x4 = LpVariable("x4",lowBound=0)

# Defining the problem

problem = LpProblem("problem",LpMaximize)

# Defining the constraints

problem += 2*x1 + x2 + 5*x3 + 6*x4 <= 100
problem += 4*x1+ 5*x2 + 3*x3 + 6*x4 <= 120
problem += 7*x1 + 3*x2 + 4*x3 + 4*x4 <= 90

# Defining the objective function

problem += 70*x1 + 65*x2 + 80*x3 + 75*x4

# Solving the problem

solution = problem.solve()
LpStatus[solution]

print(f"Value of x1: {value(x1)} \nValue of x2: {value(x2):.2f} \nValue of x3: {value(
print(f"Max: {70*value(x1) + 65*value(x2) + 80*value(x3) + 75*value(x4)}")
```

Value of x1: 0.0
Value of x2: 19.09
Value of x3: 8.18
Value of x4: 0.0
Max: 1895.454541

In [ ]: