Minimization (SIMPLEX)

```
from scipy.optimize import linprog
objfn=[1,1]
lhs=[[1,0],[0,1],[1,1]]
rhs=[6,6,11]
opt=linprog(c=objfn,A_ub=lhs,b_ub=rhs,method="simplex")
opt
```

OUTPUT :-

```
     con: array([], dtype=float64)
     fun: 0.0
 message: 'Optimization terminated successfully.'
     nit: 5
   slack: array([ 6.,  6., 11.])
  status: 0
 success: True
       x: array([0., 0.])
```

Maximization (SIMPLEX)

```
from scipy.optimize import linprog
objfn=[-20,-12,-40,-25]
lhs=[[1,1,1,1],
   [3,2,1,0],
   [0,1,2,3]]
rhs=[50,100,90]
opt=linprog(c=objfn,A_ub=lhs,b_ub=rhs,method="simplex")
opt
```

OUTPUT:-

```
  con: array([], dtype=float64)
  fun: -1899.9999999999998
  message: 'Optimization terminated successfully.'
  nit: 4
 slack: array([0.00000000e+00, 4.00000000e+01, 1.42108547e-14])
status: 0
success: True
    x: array([ 5.,  0., 45.,  0.])
```