

ESTO ES LO QUE ENCONTRÓ:

```
arreglo=[[ 0.00000000e+00  1.00000000e+00  8.00000000e+00  1.00000000e+01
 1.20000000e+01  7.60005674e+00  2.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  2.71968561e+02  1.70000000e+01]
[ 0.00000000e+00  3.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  7.72816412e+01  9.00000000e+00]
[ 0.00000000e+00  3.00000000e+00  6.00000000e+00  1.00000000e+01
 1.20000000e+01 -2.95550479e+00  3.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  6.00000000e+00  1.00000000e+01
 1.20000000e+01 -9.81995500e-02  1.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  4.00000000e+00  1.10000000e+01
 1.20000000e+01  4.96114956e+02  9.48000000e+02]
[ 0.00000000e+00  1.00000000e+00  7.00000000e+00  1.10000000e+01
 1.20000000e+01  1.12871648e+02  1.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  4.00000000e+00  9.00000000e+00
 1.20000000e+01  3.83907229e+02  1.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  8.00000000e+00  1.00000000e+01
 1.20000000e+01  1.96343966e+02  6.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  6.00000000e+00  1.10000000e+01
 1.20000000e+01  1.12712029e+02  2.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  7.00000000e+00  1.10000000e+01
 1.20000000e+01  3.05299921e+02  5.00000000e+00]
[ 0.00000000e+00  3.00000000e+00  6.00000000e+00  1.10000000e+01
 1.20000000e+01  1.09638831e+02  2.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  8.13294010e+01  2.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]]
```

camino encontrado opt= [0. 2. 4. 11. 12.] gananciapromax=

496.1149555621837 Veces elegido = 948.0

Ruta del preferido =[0. 2. 4. 11. 12.] Veces del preferido = 948.0

ganancia del preferido = 496.1149555621837

camino encontrado opt =[0. 2. 4. 11. 12.] caminooptimo real=[0. 2. 4. 11. 12.]

ESTO ES LO QUE ENCONTRÓ:

```
arreglo=[[ 0.00000000e+00  3.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  7.51401622e+01  7.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  8.00000000e+00  1.00000000e+01
 1.20000000e+01  1.97461231e+02  6.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  6.00000000e+00  1.00000000e+01
 1.20000000e+01 -4.21042107e-01  2.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  4.00000000e+00  1.10000000e+01
 1.20000000e+01  4.95990204e+02  2.50000000e+01]
[ 0.00000000e+00  2.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  2.72621795e+02  9.43000000e+02]
[ 0.00000000e+00  1.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  7.91095324e+01  5.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  7.00000000e+00  1.10000000e+01
 1.20000000e+01  3.07323987e+02  7.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  6.00000000e+00  1.10000000e+01
 1.20000000e+01  1.11637588e+02  2.00000000e+00]]
```

```

[ 0.00000000e+00  2.00000000e+00  4.00000000e+00  9.00000000e+00
 1.20000000e+01  3.88109206e+02  1.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  8.00000000e+00  1.00000000e+01
 1.20000000e+01  4.84586349e+00  1.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]]
camino encontrado opt= [ 0.  2.  4. 11. 12.] gananciapromax=
495.9902040737414 Veces elegido = 25.0
Ruta del preferido =[ 0.  2.  5. 11. 12.] Veces del preferido = 943.0
ganancia del preferido = 272.6217946166094
camino encontrado opt =[ 0.  2.  4. 11. 12.] caminooptimo real=[ 0.  2.
4. 11. 12.]
ESTO ES LO QUE ENCONTRÓ:
arreglo=[[ 0.00000000e+00  1.00000000e+00  6.00000000e+00  1.00000000e+01
 1.20000000e+01  3.24090103e-01  1.00000000e+00]
[ 0.00000000e+00  3.00000000e+00  6.00000000e+00  1.00000000e+01
 1.20000000e+01 -9.56446126e-01  3.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  7.00000000e+00  1.10000000e+01
 1.20000000e+01  1.14565416e+02  3.00000000e+00]
[ 0.00000000e+00  1.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  8.03175185e+01  4.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  4.00000000e+00  1.10000000e+01
 1.20000000e+01  4.95962234e+02  9.12000000e+02]
[ 0.00000000e+00  3.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  7.91241906e+01  7.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  4.00000000e+00  9.00000000e+00
 1.20000000e+01  3.85434287e+02  2.00000000e+00]
[ 0.00000000e+00  3.00000000e+00  6.00000000e+00  1.10000000e+01
 1.20000000e+01  1.10323692e+02  4.00000000e+00]
[ 0.00000000e+00  2.00000000e+00  5.00000000e+00  1.10000000e+01
 1.20000000e+01  2.72524849e+02  3.20000000e+01]
[ 0.00000000e+00  2.00000000e+00  8.00000000e+00  1.00000000e+01
 1.20000000e+01  1.96497940e+02  2.20000000e+01]
[ 0.00000000e+00  2.00000000e+00  7.00000000e+00  1.10000000e+01
 1.20000000e+01  3.05496695e+02  9.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00
 0.00000000e+00  0.00000000e+00  0.00000000e+00]]
camino encontrado opt= [ 0.  2.  4. 11. 12.] gananciapromax=
495.9622339254611 Veces elegido = 912.0

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Ruta del preferido =[0. 2. 4. 11. 12.] Veces del preferido = 912.0
 ganancia del preferido = 495.9622339254611
 camino encontrado opt =[0. 2. 4. 11. 12.] caminoptimo real=[0. 2. 4. 11. 12.]

ESTO ES LO QUE ENCONTRÓ:

arreglo=[	0.	3.	6.	10.	12.
	-3.5357996	2.			
[	0.	1.	5.	11.	12.
	79.77131178	5.			
[	0.	2.	8.	10.	12.
	196.60825854	20.			
[	0.	2.	7.	11.	12.
	306.35537329	25.			
[	0.	2.	5.	11.	12.
	272.90571122	27.			
[	0.	3.	5.	11.	12.
	77.70679199	11.			
[	0.	1.	6.	10.	12.
	2.72294528	2.			
[	0.	1.	7.	11.	12.
	112.98929026	2.			
[	0.	2.	4.	11.	12.
	496.03683616	897.			
[	0.	1.	8.	10.	12.
	4.68074492	2.			
[	0.	3.	6.	11.	12.
	110.13385388	4.			
[	0.	1.	6.	11.	12.
	115.97015171	1.			
[	0.	2.	4.	9.	12.
	390.41245668	1.			
[	0.	0.	0.	0.	0.
	0.	0.			
[	0.	0.	0.	0.	0.
	0.	0.			

camino encontrado opt= [0. 2. 4. 11. 12.] gananciapromax=
 496.03683616241193 Veces elegido = 897.0

Ruta del preferido =[0. 2. 4. 11. 12.] Veces del preferido = 897.0
 ganancia del preferido = 496.03683616241193
 camino encontrado opt =[0. 2. 4. 11. 12.] caminoptimo real=[0. 2. 4. 11. 12.]

ESTO ES LO QUE ENCONTRÓ:

arreglo=[	0.	2.	4.	11.	12.
	498.99809811	930.			
[	0.	1.	6.	10.	12.
	2.09538266	1.			
[	0.	3.	6.	11.	12.
	112.48493088	4.			
[	0.	2.	7.	11.	12.
	306.10865046	17.			
[	0.	3.	6.	10.	12.
	-1.03952157	3.			
[	0.	1.	7.	11.	12.
	112.52727669	3.			

[0.	2.	5.	11.	12.
272.36102432	15.]		
[0.	3.	5.	11.	12.
77.83605607	10.]		
[0.	1.	8.	10.	12.
3.18475737	1.]		
[0.	1.	6.	11.	12.
115.23720104	2.]		
[0.	2.	4.	9.	12.
385.1221418	2.]		
[0.	2.	8.	10.	12.
196.69386598	8.]		
[0.	1.	5.	11.	12.
81.7137857	3.]		
[0.	0.	0.	0.	0.
0.	0.]		
[0.	0.	0.	0.	0.
0.	0.]]		

camino encontrado opt= [0. 2. 4. 11. 12.] gananciapromax=

498.99809810648657 Veces elegido = 930.0

Ruta del preferido =[0. 2. 4. 11. 12.] Veces del preferido = 930.0

ganancia del preferido = 498.99809810648657

camino encontrado opt =[0. 2. 4. 11. 12.] caminoptimo real=[0. 2. 4. 11. 12.]

ESTO ES LO QUE ENCONTRÓ:

arreglo=[[0.00000000e+00 1.00000000e+00 8.00000000e+00 1.00000000e+01

1.20000000e+01	6.34156387e+00	6.00000000e+00]	
[0.00000000e+00	1.00000000e+00	7.00000000e+00	1.10000000e+01
1.20000000e+01	1.14211389e+02	6.00000000e+00]	
[0.00000000e+00	1.00000000e+00	5.00000000e+00	1.10000000e+01
1.20000000e+01	8.03185611e+01	4.00000000e+00]	
[0.00000000e+00	2.00000000e+00	4.00000000e+00	9.00000000e+00
1.20000000e+01	3.87870267e+02	1.00000000e+00]	
[0.00000000e+00	3.00000000e+00	6.00000000e+00	1.10000000e+01
1.20000000e+01	1.12253880e+02	6.00000000e+00]	
[0.00000000e+00	2.00000000e+00	5.00000000e+00	1.10000000e+01
1.20000000e+01	2.71912715e+02	7.00000000e+00]	
[0.00000000e+00	3.00000000e+00	6.00000000e+00	1.00000000e+01
1.20000000e+01	-3.43833856e+00	3.00000000e+00]	
[0.00000000e+00	1.00000000e+00	6.00000000e+00	1.00000000e+01
1.20000000e+01	7.37876888e-01	1.00000000e+00]	
[0.00000000e+00	3.00000000e+00	5.00000000e+00	1.10000000e+01
1.20000000e+01	7.77980095e+01	2.00000000e+00]	
[0.00000000e+00	2.00000000e+00	7.00000000e+00	1.10000000e+01
1.20000000e+01	3.04867564e+02	6.00000000e+00]	
[0.00000000e+00	2.00000000e+00	4.00000000e+00	1.10000000e+01
1.20000000e+01	4.96106850e+02	9.47000000e+02]	
[0.00000000e+00	1.00000000e+00	6.00000000e+00	1.10000000e+01
1.20000000e+01	1.12939861e+02	5.00000000e+00]	
[0.00000000e+00	2.00000000e+00	8.00000000e+00	1.00000000e+01
1.20000000e+01	1.96075311e+02	5.00000000e+00]	
[0.00000000e+00	0.00000000e+00	0.00000000e+00	0.00000000e+00
0.00000000e+00	0.00000000e+00	0.00000000e+00]	
[0.00000000e+00	0.00000000e+00	0.00000000e+00	0.00000000e+00

```

0.00000000e+00 0.00000000e+00 0.00000000e+00]]
camino encontrado opt= [ 0. 2. 4. 11. 12.] gananciapromax=
496.1068500246143 Veces elegido = 947.0
Ruta del preferido =[ 0. 2. 4. 11. 12.] Veces del preferido = 947.0
ganancia del preferido = 496.1068500246143
camino encontrado opt =[ 0. 2. 4. 11. 12.] caminoptimo real=[ 0. 2.
4. 11. 12.]

```

ESTO ES LO QUE ENCONTRÓ:

```

arreglo=[[ 0.00000000e+00 2.00000000e+00 8.00000000e+00 1.00000000e+01
1.20000000e+01 1.97031914e+02 2.10000000e+01]
[ 0.00000000e+00 2.00000000e+00 4.00000000e+00 1.10000000e+01
1.20000000e+01 4.96013417e+02 9.39000000e+02]
[ 0.00000000e+00 2.00000000e+00 4.00000000e+00 9.00000000e+00
1.20000000e+01 3.84667331e+02 3.00000000e+00]
[ 0.00000000e+00 3.00000000e+00 6.00000000e+00 1.00000000e+01
1.20000000e+01 1.59072872e-01 6.00000000e+00]
[ 0.00000000e+00 3.00000000e+00 5.00000000e+00 1.10000000e+01
1.20000000e+01 7.83700396e+01 5.00000000e+00]
[ 0.00000000e+00 1.00000000e+00 8.00000000e+00 1.00000000e+01
1.20000000e+01 5.22603727e+00 3.00000000e+00]
[ 0.00000000e+00 2.00000000e+00 7.00000000e+00 1.10000000e+01
1.20000000e+01 3.05827191e+02 1.30000000e+01]
[ 0.00000000e+00 1.00000000e+00 7.00000000e+00 1.10000000e+01
1.20000000e+01 1.15204139e+02 2.00000000e+00]
[ 0.00000000e+00 2.00000000e+00 5.00000000e+00 1.10000000e+01
1.20000000e+01 2.73071513e+02 3.00000000e+00]
[ 0.00000000e+00 1.00000000e+00 5.00000000e+00 1.10000000e+01
1.20000000e+01 8.01729762e+01 2.00000000e+00]
[ 0.00000000e+00 1.00000000e+00 6.00000000e+00 1.00000000e+01
1.20000000e+01 -1.23657244e+00 1.00000000e+00]
[ 0.00000000e+00 3.00000000e+00 6.00000000e+00 1.10000000e+01
1.20000000e+01 1.14359118e+02 1.00000000e+00]
[ 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00
0.00000000e+00 0.00000000e+00 0.00000000e+00]
[ 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00
0.00000000e+00 0.00000000e+00 0.00000000e+00]
[ 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00
0.00000000e+00 0.00000000e+00 0.00000000e+00]
[ 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00
0.00000000e+00 0.00000000e+00 0.00000000e+00]
0.00000000e+00 0.00000000e+00 0.00000000e+00]]

```

```

camino encontrado opt= [ 0. 2. 4. 11. 12.] gananciapromax=
496.0134170186476 Veces elegido = 939.0
Ruta del preferido =[ 0. 2. 4. 11. 12.] Veces del preferido = 939.0
ganancia del preferido = 496.0134170186476
camino encontrado opt =[ 0. 2. 4. 11. 12.] caminoptimo real=[ 0. 2.
4. 11. 12.]

```

ESTO ES LO QUE ENCONTRÓ:

```

arreglo=[[ 0. 1. 7. 11. 12.
110.02121248 5. ]
[ 0. 2. 8. 10. 12.
195.9547067 11. ]
[ 0. 2. 5. 11. 12.
272.22568218 17. ]
[ 0. 1. 5. 11. 12.
82.09120106 5. ]
[ 0. 3. 6. 10. 12.

```

-2.8436044	2.]		
[0.	2.		7.	11. 12.
305.55774171	943.]		
[0.	3.		5.	11. 12.
77.54333717	5.]		
[0.	1.		6.	10. 12.
2.83108553	3.]		
[0.	2.		4.	11. 12.
494.27096458	5.]		
[0.	1.		8.	10. 12.
4.50524367	3.]		
[0.	0.		0.	0. 0.
0.	0.]		
[0.	0.		0.	0. 0.
0.	0.]		
[0.	0.		0.	0. 0.
0.	0.]		
[0.	0.		0.	0. 0.
0.	0.]		
[0.	0.		0.	0. 0.
0.	0.]		
[0.	0.		0.	0. 0.
0.	0.]		
[0.	0.		0.	0. 0.
0.	0.]]		

camino encontrado opt= [0. 2. 4. 11. 12.] gananciapromax= 494.2709645792637 Veces elegido = 5.0

Ruta del preferido =[0. 2. 7. 11. 12.] Veces del preferido = 943.0 ganancia del preferido = 305.55774170723515

camino encontrado opt =[0. 2. 4. 11. 12.] caminoptimo real=[0. 2. 4. 11. 12.]

ESTO ES LO QUE ENCONTRÓ:

arreglo=[[0.00000000e+00 3.00000000e+00 5.00000000e+00 1.10000000e+01 1.20000000e+01 7.91906636e+01 1.50000000e+01]
 [0.00000000e+00 2.00000000e+00 5.00000000e+00 1.10000000e+01 1.20000000e+01 2.72488902e+02 5.80000000e+01]
 [0.00000000e+00 1.00000000e+00 8.00000000e+00 1.00000000e+01 1.20000000e+01 3.17466069e+00 5.00000000e+00]
 [0.00000000e+00 3.00000000e+00 6.00000000e+00 1.10000000e+01 1.20000000e+01 1.10933307e+02 6.00000000e+00]
 [0.00000000e+00 2.00000000e+00 4.00000000e+00 9.00000000e+00 1.20000000e+01 3.85230977e+02 2.00000000e+00]
 [0.00000000e+00 2.00000000e+00 7.00000000e+00 1.10000000e+01 1.20000000e+01 3.06634226e+02 1.40000000e+01]
 [0.00000000e+00 1.00000000e+00 6.00000000e+00 1.00000000e+01 1.20000000e+01 2.13848296e+00 2.00000000e+00]
 [0.00000000e+00 2.00000000e+00 8.00000000e+00 1.00000000e+01 1.20000000e+01 1.94723624e+02 7.00000000e+00]
 [0.00000000e+00 2.00000000e+00 4.00000000e+00 1.10000000e+01 1.20000000e+01 4.96060978e+02 8.85000000e+02]
 [0.00000000e+00 1.00000000e+00 7.00000000e+00 1.10000000e+01 1.20000000e+01 1.12260264e+02 3.00000000e+00]
 [0.00000000e+00 3.00000000e+00 6.00000000e+00 1.00000000e+01 1.20000000e+01 7.94099915e-02 1.00000000e+00]
 [0.00000000e+00 1.00000000e+00 5.00000000e+00 1.10000000e+01 1.20000000e+01 8.02690502e+01 1.00000000e+00]
 [0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
 [0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]

```

[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00
 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00
 0.00000000e+00 0.00000000e+00 0.00000000e+00]]
camino encontrado opt= [ 0.  2.  4. 11. 12.] gananciapromax=
496.0609778918672 Veces elegido = 885.0
Ruta del preferido =[ 0.  2.  4. 11. 12.] Veces del preferido = 885.0
ganancia del preferido = 496.0609778918672
camino encontrado opt =[ 0.  2.  4. 11. 12.] caminoptimo real=[ 0.  2.
4. 11. 12.]
ESTO ES LO QUE ENCONTRÓ:
arreglo=[ [ 0.          3.          6.          11.          12.
111.29672827  2.          ]
[ 0.          3.          5.          11.          12.
78.65860239  1.          ]
[ 0.          1.          8.          10.          12.
4.80188145  4.          ]
[ 0.          2.          4.          9.          12.
385.66333904 2.          ]
[ 0.          1.          6.          10.          12.
4.38540438  1.          ]
[ 0.          3.          6.          10.          12.
-2.47136436 3.          ]
[ 0.          2.          4.          11.          12.
496.51520822 8.          ]
[ 0.          2.          5.          11.          12.
272.84697791 12.         ]
[ 0.          2.          8.          10.          12.
196.85038061 4.          ]
[ 0.          2.          7.          11.          12.
305.71804912 959.        ]
[ 0.          1.          6.          11.          12.
115.39147419 1.          ]
[ 0.          1.          7.          11.          12.
112.67226188 2.          ]
[ 0.          0.          0.          0.          0.
0.          0.          ]
[ 0.          0.          0.          0.          0.
0.          0.          ]
[ 0.          0.          0.          0.          0.
0.          0.          ]
0.          0.          ]]
```

camino encontrado opt= [0. 2. 4. 11. 12.] gananciapromax=
496.5152082154448 Veces elegido = 8.0
Ruta del preferido =[0. 2. 7. 11. 12.] Veces del preferido = 959.0
ganancia del preferido = 305.7180491175808
camino encontrado opt =[0. 2. 4. 11. 12.] caminoptimo real=[0. 2.
4. 11. 12.]