12 Traveling Salesperson

In this problem to will need to maximize the total sales for a salesman. The salesman sells computers so naturally the first city is city 0. There are five cities labeled 0, 1, 2, 3 and 4. The salesman starts at city 0 and visits each city exactly once. The sales volume that the salesman generates is in the matrix. For example a salesman going from city 0 to city 1 makes $999.

If a salesman is in city 1, the salesman has a choice for going to city 0 for a profit of $1 or city 2 for $9999 of city 3 for $999 or city 4 for $999. The salesman can not go to city 1 again.

Remember the salesman must start at city 0 and visit each and every city exactly 1 time.

In the output you should show the best route and the total profit for that route.

Example

		To			
	0	1	2	3	4
0	0	999	3	6	5
1	1	4	9999	999	9
2	999	0	0	9	7
3	3	0	9	999	8
4	4	5	999	0	5

(rows labeled "From")

Note: The ¶ symbol in the examples below represents a newline character.

Sample Input

```
0 999 3 6 5¶
1 4 9999 999 9¶
999 0 0 9 7¶
3 0 9 999 8¶
4 5 999 0 5¶
```

Sample Output

```
0 1 2 3 4 = 11019¶
```