

List of lists of references – follow the links

Solution

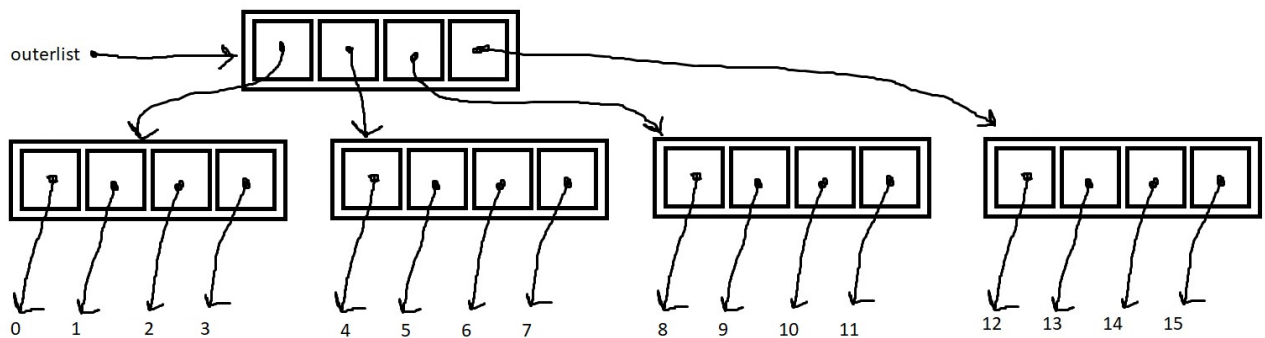
Objectives

The **objectives of this activity** are:

- To become familiar with lists of lists
- To become familiar with algorithms involving lists

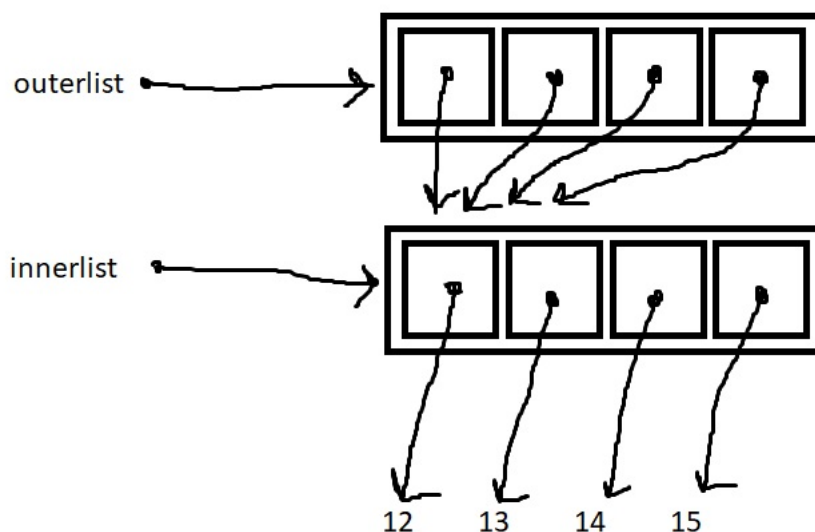
Solution

The typical student **expectation** of what code like this would do like is create a two dimensional array holding all numbers from 0 to 15 as below...



However, what we would find is that each element of the outlist just refers to the same innerList.

Following the links you would see all we are doing is overwriting the same list contents again and again, changing innerList from [0,0,0,0] to [0,1,2,3] to [4,5,6,7] to [8,9,10,11] to [12,13,14,15].



To implement this algorithm so that it matches expectations of a list of lists of 0 to 15, we need **different** inner lists, one for each cell.