```
class YoungTable {
  int A[]
  int size
  int row, col

  // Constructor( A , row , col ) { size = row * col; ... }
  idx2rc ( k )   // return (i, j)
  rc2idx ( i, j ) // return k

  int getAt(i, j)  // return a_ij
  setAt(i, j, x)     // a_ij = x

  siftDown(i, j)  // maintain the Young table if a_ij get decreased by swapping to the correct
position in the Young table

  buildYoungTable() {
    for i= row-1 downto 0
      for j=col-1 downto 0
        siftDown(i, j)
  }
}
```

Main

```
  Let A be an array of size = row.col initialized by random integers
  YoungTable z = new YoungTable( A, row, col )
  z.buildYoungTable()
  for i=0 to row-1
    for j=0 to col-1
      print(z.getAt(i, j))
    print('\n')
```