

Part 1

6 points, no help other than scala console and instructor

- 3 points) Generate numbers that are not squares of some numbers up to a value N. For N == 11 result should be:
1 2 3 5 6 7 8 10 11 (4 and 9 should not be printed)
- The **N** should be passed **from command line**, if nothing is passed then only 50 first natural numbers need to printed
 - in IJ, to set cmd line args go to:
Run -> Edit Configurations -> Program arguments, and enter some number there
- 3 points) We have 2D array:
val x = Array.ofDim[Int](4,5);
for (i <- 0 until 4; j <- 0 until 5) x(i)(j) = i+j
 - print this array in the following form:

```
| 0 1 2 3 4 |  
| 1 2 3 4 5 |  
| 2 3 4 5 6 |  
| 3 4 5 6 7 |
```
 - merge two arrays x and y of identical sizes (here 4x5) so that **each element** in the resulting array **is larger of the corresponding element in x and y**

Part 2

4 points, all help you need

- 1point) Write a function that takes any number of integers, sums them up, and returns that sum
- 1point) Write function that repetitively applies another function. I.e.:
`println(repN(5, (x: Int) => 2*x , 1))` // repeat function application N times i.e. `f(f(f(f(f(1)))))`, 1 the argument of the first invocation - expected result is 32
- 2points) Write closure that can be used to accumulate numbers like in the example:
`val ac1 = accumuator()`
`val ac2 = accumulator()`
`println(ac1(1))` // prints 1
`println(ac1(7))` // prints 8
`println(ac2(3))` // prints 3
`println(ac1(7))` // prints 15