

# Nucleus

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Java Foundation & Data Structures

Lecture 5 : Arrays



Saturday, 15 September 2018

## BT : Circular Jail Cells



There is a circular jail with 100 cells numbered 1-100. Each cell has an inmate and the door is locked. One night the jailor gets drunk and starts running around the jail in circles. In his first round he opens each door. In his second round he visits every 2nd door (2,4,6---) and shuts the door. In the 3rd round he visits every 3rd door (3,6,9---) and if the door is shut he opens it, if it is open he shuts it. This continues for 100 rounds (i.e. 4,8,12 ---; 5,10,15 ---; ---; 49,98 etc.) and exhausted the jailor falls down. **How many prisoners found their doors open after 100 rounds?**

Any doubts on assignment?

# Arrays

- How to declare arrays?
- How are arrays stored in memory?
- How to access, update etc.?

# Passing Arrays as function parameters

# Lets write some code

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- Take an integer array input from the user
- Print out sum of an array

# Your turn

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- Print out the largest element in the array
- Reverse an array