Nucleus

Java Foundation & Data Structures

Lecture 3: Functions



Saturday, 08 September 2018



Any doubts on assignment?

BT - 4: Criminal Cupbearers



An evil king has 1000 bottles of wine. A neighboring queen plots to kill the bad king, and sends a servant to poison the wine. The king's guards catch the servant after he has only poisoned one bottle. The guards don't know which bottle was poisoned, but they do know that the poison is so potent that even if it was diluted 1,000,000 times, it would still be fatal. Furthermore, the effects of the poison take one month to surface. The king decides he will get some of his prisoners in his vast dungeons to drink the wine. Rather than using 1000 prisoners each assigned to a particular bottle, this king knows that he needs to murder no more than 10 prisoners to figure out what bottle is poisoned, and will still be able to drink the rest of the wine in 1 month time. How does he pull this off?

Data types Range

How are characters stored?

For Loop

Break & Continue

Scope of Variables



Time to talk about Functions!

Functions



- Modifiers
- Return Type
- Name
- Arguments



Why do we need Functions?



How function calling works?



Lets move code of questions from last class to separate functions



Variables and their Scope

Scope of variables



- Local Variables
- Argument Variables
- Variables inside loop
- Same variable names in different functions
- Same variable names within same scope



Pass by Value

Pointers



• Don't have to worry about them in Java