# **INCEPTION**

C++ Foundation & Data Structures

Lecture 18: OOPS - 1



Sunday, 8 October 17



## Doubts from Last Class?



# Object Oriented Programming

#### C++ Classes



- Classes & Objects
- Data
- Functions

### Classes & Objects



- Blueprint to generate instances of same nature
- Each individual instance is an object



## Access Modifiers



How to create Objects?



## Default methods with every class

#### Constructor and Default Methods



- Constructor(Java and C++)
- Copy Constructor(C++)
- Copy Assignment Operator(C++)
- Destructor(C++)



## User defined constructors



When are objects created on the stack and when are they created on the heap?



## Lets look at examples



# Shallow & Deep copy



## Fraction class

### BT - Finding the Fastest horses



You have 25 horses and you can race only 5 of them simultaneously. Assuming you do not have access to stop-watch, how many times would you need to race the horses to find the 3 fastest horses.



Thank you

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