



Core Java Practice Assignment

Guidelines:

- 🎬 This assignment is mandatory for everyone
- 🎬 There will only be a single attempt for each exam and no deadline extension in case of assignments
- 🎬 Any case of unfair means or plagiarism would lead to debarring in final placements without any further consideration.

Problem 1:

Clone this Repo : <https://github.com/devmittalciv16/boardInf>

In src/com/board/oops package lies a snake and ladder game using oops concepts.

Enhance the game with the following capabilities:

1. Whenever a player steps on another player, the another player should go to (0, 0).
2. When a player gets a 6, he would get another chance to roll the dice. He can't roll more than 2 times.
3. At the starting of the game, players must obtain a 6 to move out of the (0, 0) cell.
4. Make the game more secure by using access modifiers. Only one variable (game.isover) and one method (game.proceed()) should be public.

Problem 2:

Prepare a data type with name MyData which will be able to store numbers from -512 to 511 in memory optimized way.

It should have following capabilities:

1. Constructor should look like this : `MyData a = new MyData(int b);`
2. Only public method would be `getValue()` with return type as `int`.
3. This data type should be unmodifiable (nobody can change the value once assigned)

Problem 3:

Clone this Repo : <https://github.com/devmittalciv16/boardInf>

In src/com/board/bank package lies a bank manager program using oops concepts.

Enhance the program with the following capabilities:

1. A user can't withdraw more than the balance he has.
2. An upgrade offer for regular users to upgrade their account to premium.
3. Premium users can get a loan upto total 25000.
4. Regular users can get a loan upto total 15000.
5. Make the program more secure so that nobody outside is able to illegally access it.