

OOP-Task#1

Q1:

Create **class Account** that contains the following :

- Id
- Name
- Balance
- Default constructor
- Parameterized constructor
- Copy constructor
- Setters & getters
- `printInfo()` => method to print account information's
- `TransferTo()` => method that transfer particular amount of money from account to another one

- **Your main should be as follow :**

```
Account a(1,"name",1000);  
Account b(a);  
a.TransferTo(b,200);  
a.printInfo(); // balance = 800  
b.printInfo(); // balance = 1200
```

Q2 :

- Create **class Student** that contains the following :
 - Id
 - Name
 - Mark[5] => to store 5 marks for student
 - Default constructor
 - Parameterized constructor
 - setId , getId
 - setName , getName
 - read_marks() => method that reads student marks
 - printInfo() => method print student's information (id , name and avg)
 - calc_avg() => method that calc student avg and return it

- Define **function get_max()** , pass your array of objects to the function , and return the student that has maximum gpa .

- **In main :**
 - Define an array of 3 elements of type Student .
 - Ask the user to enter their information .
 - Print information for the student that has a maximum gpa .

Q3:

- Create **class Point** that contains the following :
 - `int x`
 - `int y`
 - default & parameterized constructors
 - setters & getters
- Create **class Circle** that consist of following :
 - `Point center`
 - `Double radius`
 - default & parameterized constructors
 - setters & getters
 - `calcArea()` => method calc area of circle and return it
- **In main :**
 - define object from class Circle using parameterized constructor .
 - define another object from class Circle and initialize it using first object , then print its area.