

## Problem 1(OOP)

### Intuition:

When a method in a subclass overrides a method in superclass, it is still possible to call the overridden method

using **super** keyword. If you write *super.func()* to call the function *func()*, it will call the method that was defined in the superclass.

You are given a partially completed code in the editor. Modify the code so that the code prints the following text:

Hello I am a motorcycle, I am a cycle with an engine.

My ancestor is a cycle who is a vehicle with pedals.

### Solution:

```
import java.util.*;
import java.io.*;

class BiCycle{
    String define_me(){
        return "a vehicle with pedals.";
    }
}

class Motorcycle extends BiCycle{
    String define_me(){
        return "a cycle with an engine.";
    }

    Motorcycle(){
        System.out.println("Hello I am a motorcycle, I am "+ define_me());

        String temp=super.define_me(); //Fix this line

        System.out.println("My ancestor is a cycle who is "+ temp );
    }
}

class Solution{
    public static void main(String []args){
        Motorcycle M=new Motorcycle();
    }
}
```

## Problem 2(DBMS)

Intuition:

Solution:

# Write your MySQL query statement below

```
with nun_tv_15 as (  
    select tiv_2015  
    from insurance  
    group by tiv_2015  
    having count(*) > 1  
) , un_11 as(  
    select lat, lon  
    from insurance  
    group by lat, lon  
    having count(*) = 1  
)  
select round(sum(tiv_2016),2) as tiv_2016  
from insurance i  
where tiv_2015 in (select tiv_2015 from nun_tv_15)  
and (lat, lon) in (select lat, lon from un_11);
```