**Question:**

***Part A: Course Class***

1. *Define a* ***Course*** *class with the following private attributes:* 
   * ***name****: A* ***String*** *representing the course name.*
   * ***mark****: An* ***integer*** *representing the course mark.*
2. *Create a* ***constructor*** *to initialize the attributes.*
3. *Create a* ***set and get methods for attribute name.***
4. *Create a set method that will only store values>=0 in attribute mark*
5. *Create a get method that only returns value of mark attribute if its >=35 else the method should returns 35.*
6. *Draw the UML class Diagram for class Course*

***Part B:***JavaApplication20 ***class (3 marks)***

*Write a* ***main()*** *method and do the required tasks below:*

1. *Create a* ***Course*** *object.*
2. *Print name and mark for the above object.*
3. ***Change name and mark for the above object****.*
4. *Print name and mark for the above object after the changes.*

Solution:

public class Course {

private String name;

private int mark;

public Course(String n,int m)

{

name = n;

mark = m;

}

public String getName()

{

return name;

}

public void setName(String n)

{

name = n;

}

public int getMark()

{

if(mark>=35)

return mark;

else

return 35;

}

public void setMark(int m)

{

if(m>=0)

mark = m;

}

}

*UML class Diagram for class Course:*

|  |
| --- |
| Course |
| - name : String  - mark : int |
| + Course(String, int)  + getName() : String  + setName(String): void  + getMark() : int  + setMark(int) : void |

public class JavaApplication20 {

/\*\*

\* @param args the command line arguments

\*/

public static void main(String[] args) {

// TODO code application logic here

// Course c1 = new Course();// Error the constructor in

// class course takes two parameters

Course c1 = new Course("OOP",70);

System.out.println("name: "+ c1.getName());

System.out.println("mark: "+c1.getMark());

c1.setName("C++");

c1.setMark(88);

System.out.println("name: "+ c1.getName());

System.out.println("mark: "+c1.getMark());

}

}