Exercise 1

| Group Number: | 19 |
|----------------|-----------------------------|
| Group Members: | |
| 1201303219 | Shaon, Tanzir Ahmed |
| 1191302794 | Ahmad Ayaan |
| 1201303220 | Shaily, Fahima Hassan |
| 1201303035 | Salah Fayeq Y Al Haismawi |
| 1201101872 | Anis Balqis Binti Rizaludin |

Submission instructions:

- This is a group exercise, 1 submission per group. Early submission is allowed. You can submit as many times as you wish, but only keep 1 submission in Google drive.
- Please submit in PDF file format, another file type will have marks deducted.
- Name your file name in the format (Ex#_Group##.pdf) with your group number, eg: Ex1_Group01.pdf (Case sensitive).
- All submissions after the deadline will be granted ZERO marks.
- Plagiarism will be penalized with ZERO marks.

Deadline: Week 4 Sunday, 12.00 am (midnight)

Questions:

- 1. Make a *Person* class that contains a *name*. It should have a constructor that allows you to give the person a name.
- 2. Make a *Student* class that is a type of *Person*. It should have a *CGPA*. It should have a constructor that can specify the student's name and CGPA.
- 3. Make sure that the above two classes can allow collaborators to tell them to have new names, and students can be told to modify their CGPA.
- 4. Is the above a runnable application? Explain why it is or is not.

You may use BlueJ or any text editor to create the classes and then copy & paste the code below, or you may just type your code directly below.

Person class

```
You, 4 minutes ago | 1 author (You)
     public class Person {
         private String name;
         //default constructor
         Person (){}
         //overloaded constructor
         Person(String name){
             this.name = name;
         //setters
         public void setName(String name){
             this.name = name;
             System.out.println("The name have been updated to " + name);
17
         //getters
         public String getName(){
            return name;
23
```

Student class

```
You, 3 days ago * Exercise 1
You, I minute ago | 1 author (You)

public class Student extends Person {
    private double cgpa;

    //default constructor
    Student(){}

    //overloaded constructor
    Student(String name, double cgpa) {
        super(name);
        this.cgpa = cgpa;
    }

    //setters
    public void modifyCgpa(double cgpa){
        this.cgpa = cgpa;
        System.out.println("The cgpa have been updated to- "+ cgpa + "for the student named " + this.getName());
    }

    //getters
    public double getCgpa(){
        return cgpa;
    }
}
```

Is it a runnable application? Why or why not?

It is not runnable since there isn't any static block nor main method (N.B.: Main method is also static). Java code can be executed using static blocks, even without the main method. But it can't be executed without any static blocks.

But, this code can surely be compiled.