Assignment-2

1. The attributes of student class:

* Hidden:
  + studentId
  + password
* Exposed:
  + studentName
  + residentialStatus
  + fees
  + coursesTaken
  + marksScored

1. Calculation of grade:

* We need to only write one method namely calculateGrade() in the Student class and that can be overridden by the sub classes of Student class.
* As the sub classes override the method, the name and signature of the method would be same.
* The functionality of the method would be same for day scholar and host-elite students. But when it comes to post graduate and graduate students the grading functionality may change.

1. Fees for students:

* We only need to write one method in the Student class namely totalFees() and that can be overridden by Dayscholar and HostElite subclasses.

1. OOP features implemented:

* Inheritance and Polymorphism will be implemented in b & c.
* Encapsulation is implemented in a.