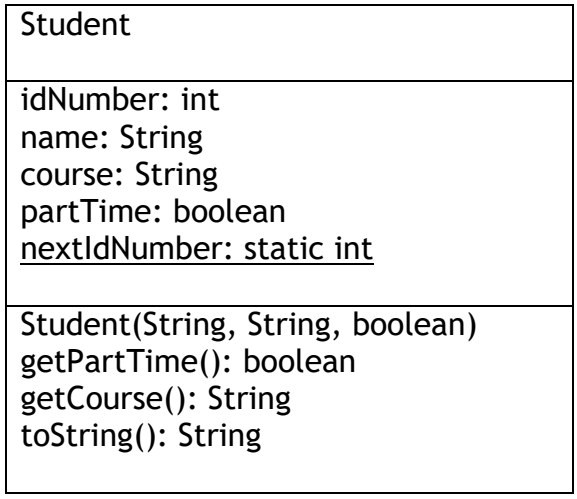
1. Write `Student` class as outlined in the below UML class diagram. The variable `nextIdNumber` is a `static` variable.



2. Write a tester class which uses an `ArrayList` to store 8 `Student`s. The class should print out details of each item in the `ArrayList`.

```
All students:
Student ID: 1001, Name: David, Course: Games Development
Student ID: 1002, Name: Luke, Course: Games Development
Student ID: 1003, Name: Emma, Course: Applied Computing
Student ID: 1004, Name: James, Course: BSc in Computing
Student ID: 1005, Name: Sarah, Course: BSc in Computing
Student ID: 1006, Name: Stephen, Course: Security & Digital Forensics
Student ID: 1007, Name: Anna, Course: Security & Digital Forensics
Student ID: 1008, Name: Bob, Course: Security & Digital Forensics
```

3. Add code so that the program prints out details of all full time `Student`s.

```
Full-time students:
Student ID: 1001, Name: David, Course: Games Development
Student ID: 1002, Name: Luke, Course: Games Development
Student ID: 1003, Name: Emma, Course: Applied Computing
Student ID: 1005, Name: Sarah, Course: BSc in Computing
Student ID: 1006, Name: Stephen, Course: Security & Digital Forensics
```

4. Add code so that the program prints out details of all part time `Student`s.

```
Part-time students:
Student ID: 1004, Name: James, Course: BSc in Computing
Student ID: 1007, Name: Anna, Course: Security & Digital Forensics
Student ID: 1008, Name: Bob, Course: Security & Digital Forensics
```

5. Add code so that the user is asked to enter the name of a course. The program will print out details of all `Student`s on that course.

```
Please enter a course name: Games Development
Student ID: 1001, Name: David, Course: Games Development
Student ID: 1002, Name: Luke, Course: Games Development
```