## Lab Task 5

The following paragraph is a scenario of making appointments with doctors. Understand and design the scenario using Object oriented concepts.

Humanity Hospital which is located in Dhaka, Bangladesh is famous for its volunteer services. It has several departments like Oncology, Surgery, Medicine, and many more. Each department has multiple doctors. They have different qualifications and specialties. Every doctor has a scheduled duty to see patients and two weekdays to go golfing. Any patient can make an appointment with a doctor. To make an appointment, the patient has to give some information like name, age, gender, appointment date, etc. If the doctor is available on that date and has vacancies for patients then the appointment will be confirmed.

As a software engineer, your task is to build a software that can facilitate the above-mentioned scenario. For now, just do the following tasks.

- Find out classes and use an appropriate name to define a class.
- Identify the properties and methods of each class.
- Identify the relationship between classes.
- Construct a UML class diagram (with attributes/method visibility, return type, parameter details)
- Implement the concept in an object oriented language (Java preferable)