

**Question:**

Metro Pharmacy reliably provides medicines to customers according to prescriptions.

The pharmacy has three different category of medicines, tablets, capsules and syrup. Each of the medicines has a name, generic (formula), retail price, a manufacture date and an expiration date.

Additionally, Tablets have sucrose level which can be a value in range 0 to 1. Capsules have absorption percentage which is a value between 1 to 100. Syrups don't have any special fields.

The pharmacy also has designated employees. A Pharmacist whose responsibility is to ensure that the medicines are sold according to prescription and a Counter Staff whose responsibility is to maintain the revenue of Metro Pharmacy.

**Flow of operation:**

The customer enters the pharmacy and presents a prescription to the counter staff. The counter staff forwards this prescription to the pharmacist who checks and recommends the appropriate medicine type. The counter staff then collects the payment, hands over the medicines and updates the overall revenue.

**Tasks to be performed:**

- a) Identify all the classes, attributes and functions in the above scenario.
- b) Implement the function **Search\_Medicine()** in both Pharmacist and Counter Staff. The function should allow Pharmacist to search and print the details of medicine based on the generic. The function in Counter Staff should allow to search the medicine using the name.