MODULE :1 SDLC

1. what is software ? what is software engineering ?

->

A) Software

- The Programme and other operating system used by a computer.

B) Software Engineering

- Software Engineering is a the study and application of engineering to the

  Desing, development, and maintenance of software.

2. Explaine Types of Software.

-

A) Application Software.

- ✓ The Most common type of software, application software is computer software package that performs a specific Function for user, or in some cases for another application.

- ✓ Application can be self-contained, or it can be a group of programs that run the application for user.
- ✓ Example
    - Database management programs
    - Web browsers
    - Software development tools
    - Image editors and communication platforms.

B) System Software.

- ✓ These software programs are designed to run a computer's application programs and hardware.
- ✓ System software coordinates the activities and function of the hardware and software.
- ✓ The os is the best example of system software; it manage all the other computer programs.

C) Driver Software.

- ✓ Also know as device drives, this software is often considered a type of system software.
- ✓ Every device that is connected to a computer needs at least one device driver to function.
- ✓ Examples include software that comes with any nonstandard hardware, including special game controllers, as well as the software that enablels standard hardware, such as USB storage devices, keyboards, headphones and printers.

D) Middleware.

- ✓ The term middleware describes software that mediates between application and system software or between two different kinds of application software.
- ✓ For example, middleware enables Microsoft Windows to talk to Ecxel and word.
- ✓ It is also used to send a remote work request from an application in a computer that has one kind of OS, to an application in a computer with a different OS.
- ✓ It also enables newer application to work with legacy ones.

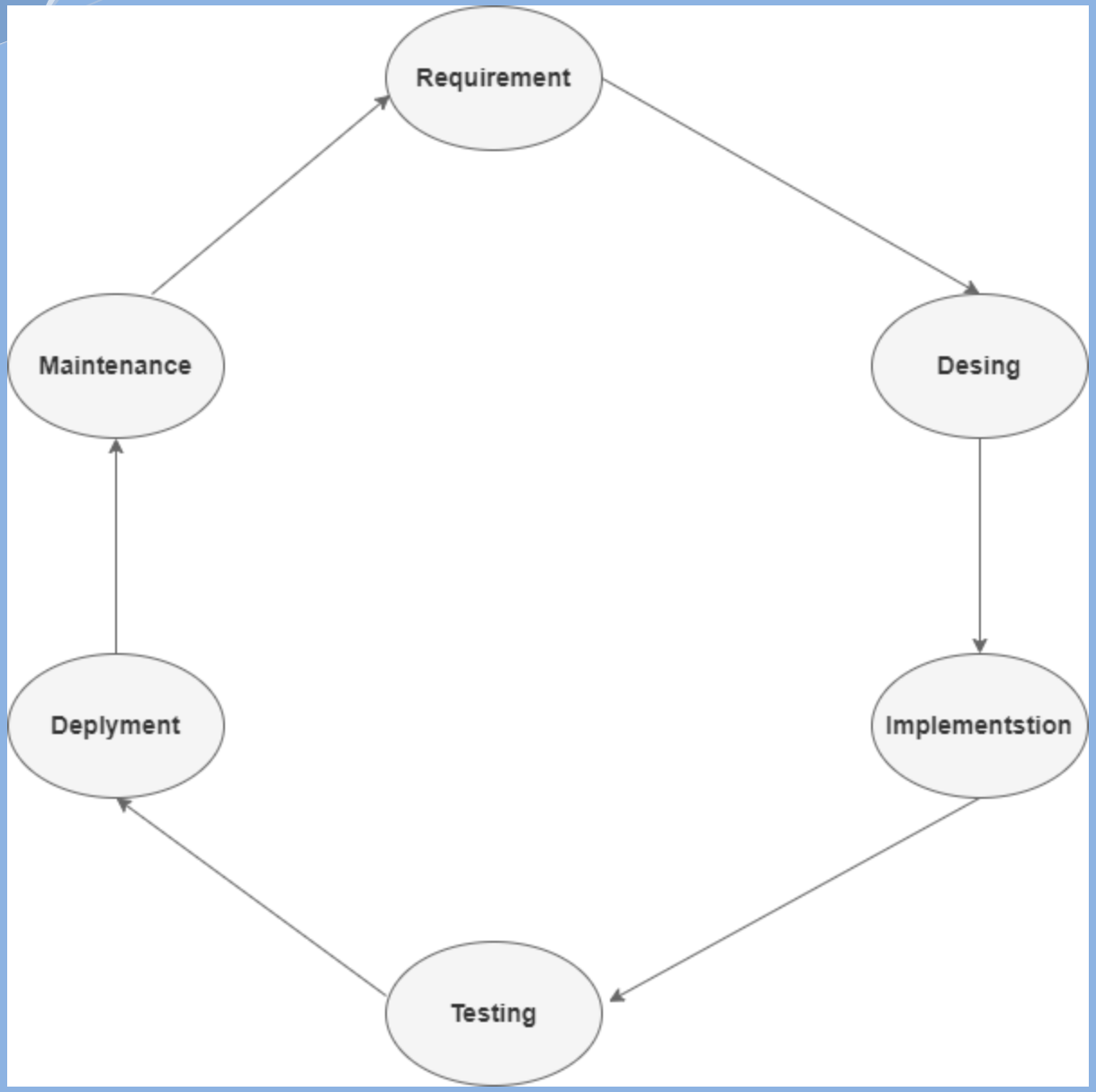
E) Programming Software.

- ✓ Computer programmers use programming software to write code.
- ✓ Programming software and programming tools enable developers to develop,write,test and debug other software programs.
- ✓ Examples of programming software include assemblers, compilers, debuggers and interpreters.

3. What is SDLC? explaine each phase of SDLC.

- ➢ SDLC
  - ✓ SDLC stand for " Software Development Life Cycle".
  - ✓ its Describe the Sequense of phases or steps to develop.

- ➢ Each phase of SDLC


Requirement
Desing
Implementstion
Testing
Deplyment
Maintenance

A) Requirement

- ✓ This phase involes gathering information about the software requirements from stakeholders, such as coustomer, end-users, and business analysts.

B) Desing

- ✓ In this phase ,the software desing is created, which includes the overall architecture of the software, data structures, and interfaces. It has two steps:

  - **High-level desing(HLD)**
    - ➔ It gives the architecture of software product.
  - **Low-Level Desing (LLD)**
    - ➔ It describes how each and every feature in the product should work and every component.

C) Implementation

- ✓ The desing is then implemented in code, usually in several iterations, and this phase is also called as Development.
- ✓ Things you need to know about this phase:
  ->This is the longest phase in SDLC model.
  ->This phase consists of front end + middleware + back-end.

i. Front End :-

Development of coding is done even SEO settings are done.

ii. Middleware :-

They Connect both the front end and back end.

iii. Back-end :-

A database is created.

D) Testing

- ✓ The software is thoroughly tested to ensure that it meets requirements and works correctly.

E) Deployment

- ✓ After successful testing, the software is deployed to aproduction environment and made available to end-users.

F) Maintenance

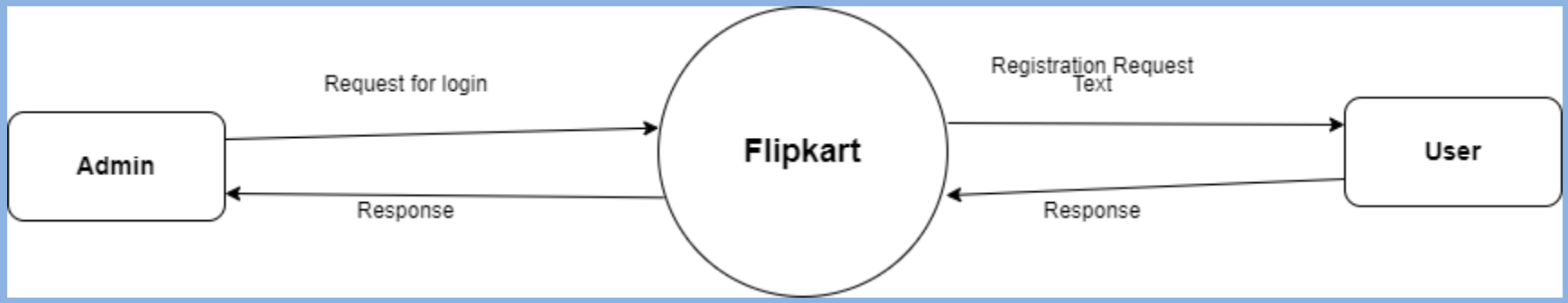
- ✓ This phase includes ongoing support, bug fixes, and updates to the software.

4) What is DFD ? Create a DFD diagram on Flipkart.

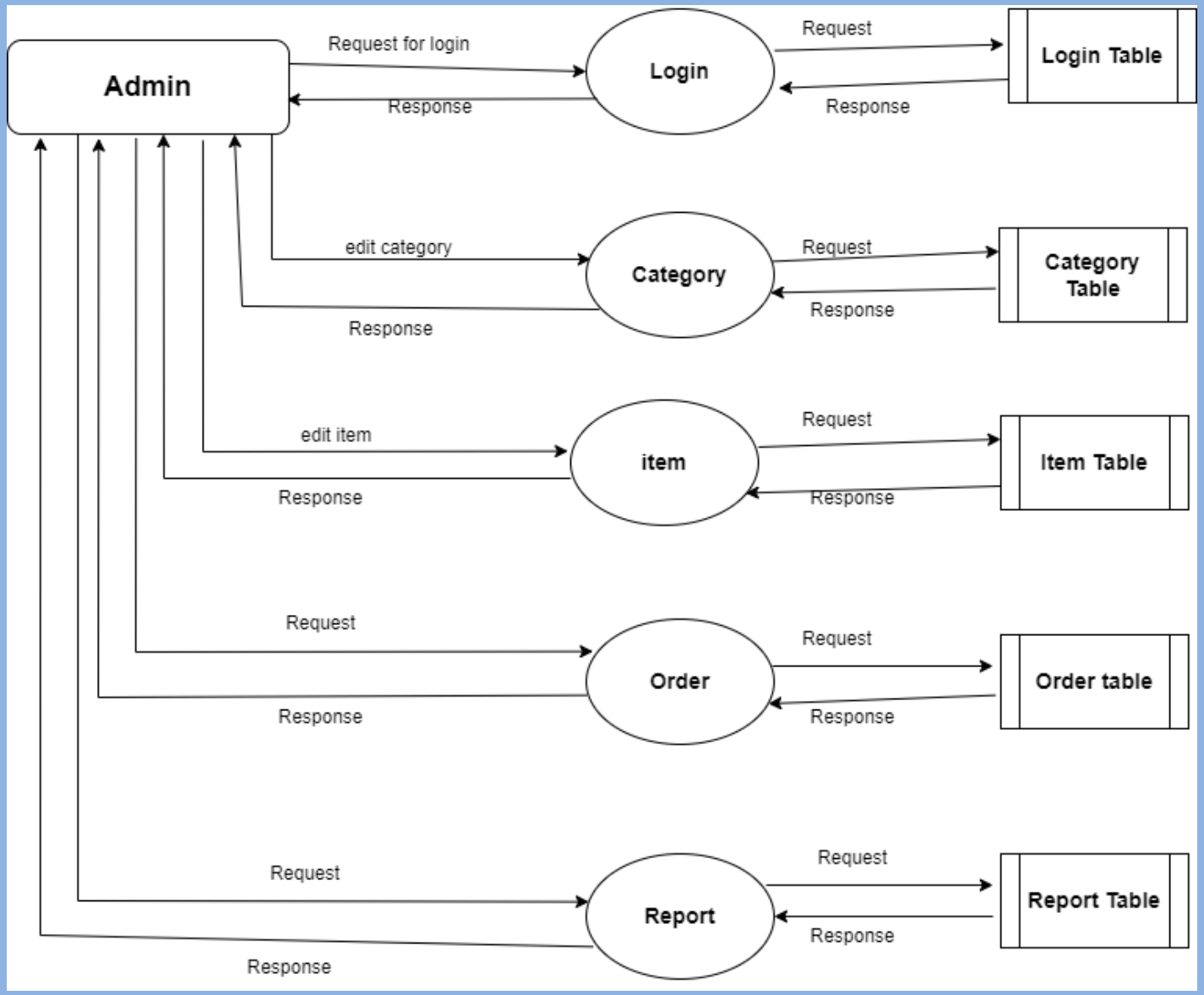
- DFD stand of "Data Flow Diagram".
- It is also Know as "Bubble chart".
- Through which we can represent the low of data graphically in an information system.

❖ DFD diagram on FLIPKART.

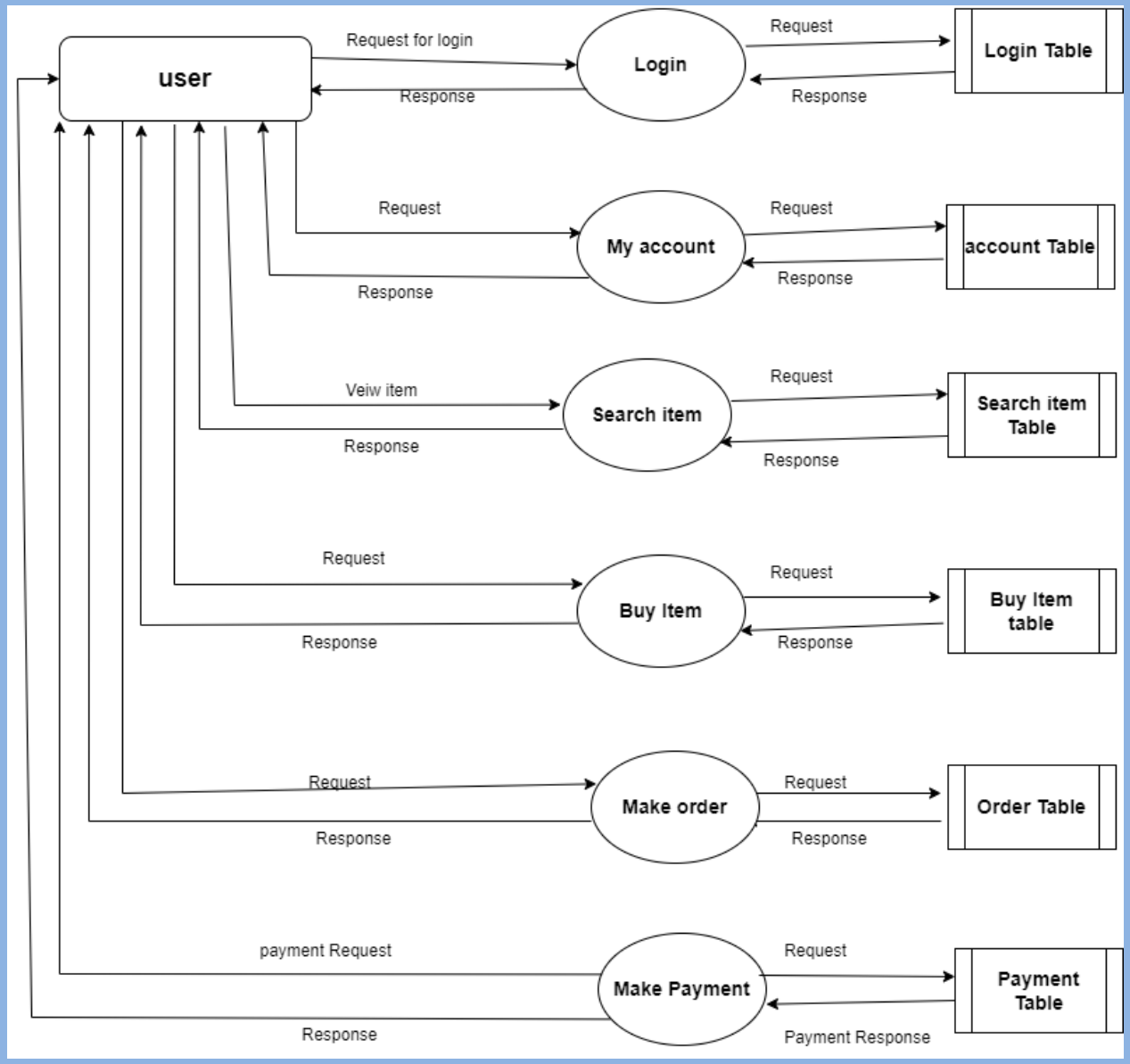
1) Level 0.



1) Level 1.

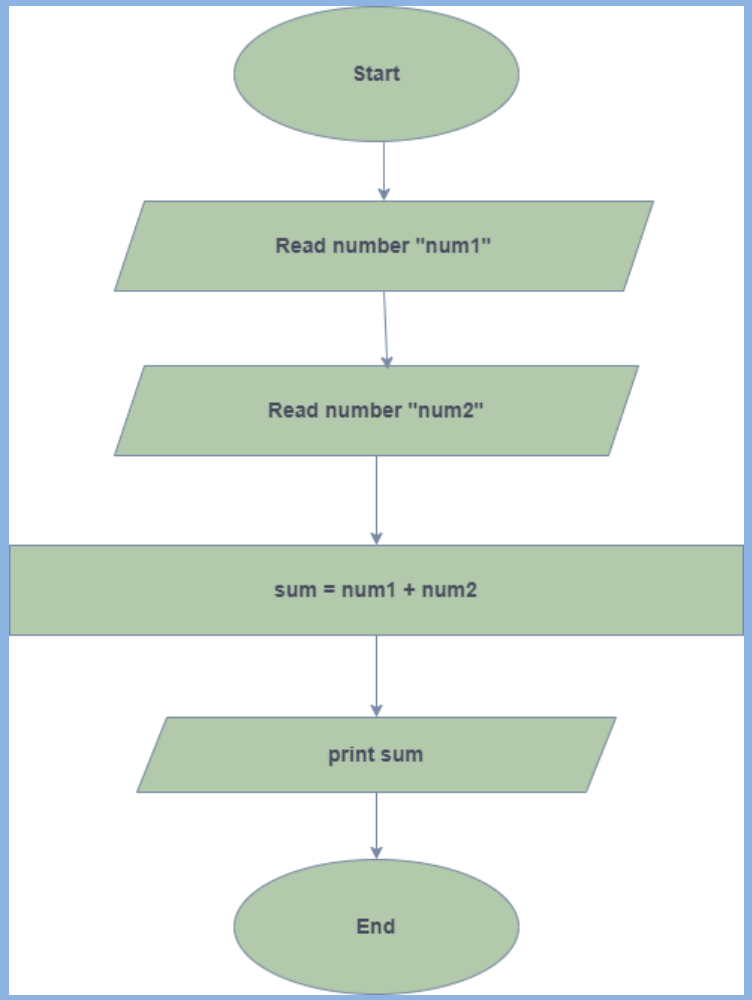

Admin
Request for login
Response
Login
Request
Response
Login Table
edit category
Response
Category
Request
Response
Category Table
edit item
Response
item
Request
Response
Item Table
Request
Response
Order
Request
Response
Order table
Request
Response
Report
Request
Response
Report Table

1) Level 2.


user
Request for login
Response
Login
Request
Response
Login Table
Request
Response
My account
Request
Response
account Table
Veiw item
Response
Search item
Request
Response
Search item Table
Request
Response
Buy Item
Request
Response
Buy Item table
Request
Response
Make order
Request
Response
Order Table
payment Request
Response
Make Payment
Request
Payment Response
Payment Table

5) What is Flow chart ? Create a flowchart to make addition of two numbers.

- A picture of the separate steps of a process in sequential order.
- Flowchart- Sum of to Numbers.



Algorithim :-

Step 1:- Start

Step 2:- Declare sum to 0

Step 3:- Read number num1.

Step 4:- Read number num2 .

Step 5:- Add num1 and num2 and assign result to variable sum.

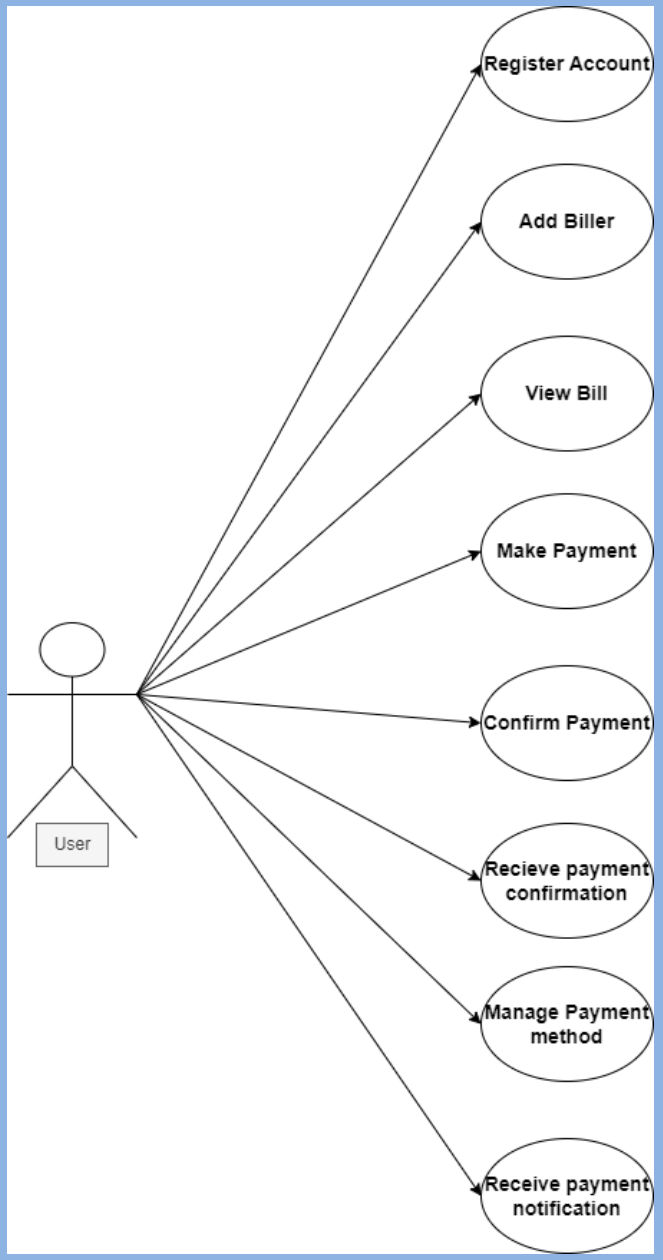
Step 6:- Print Sum.

Step 7:- Stop.

6) What is Use Case Diagram ? Create a use-case on bill payment on paytm.

- A Use Case Diagram is a graphical depiction of a user's possible interaction with a system.

- Use-Case on bill Payment on Paytm.


Register Account
Add Biller
View Bill
Make Payment
Confirm Payment
Recieve payment confirmation
Manage Payment method
Receive payment notification
User