

Aim:- Mapping Agile Development approach with software Development.

SDLC → It stands for Software Development Lifecycle.

→ It is a systematic process that helps developers plan, create, test, deploy, and maintain software.

→ It consists of various phases including

(i) Planning (ii) Analysis (iii) Design (iv) Development (v) Testing (vi) Implementation (vii) Maintenance.

→ Some common models for SDLC include

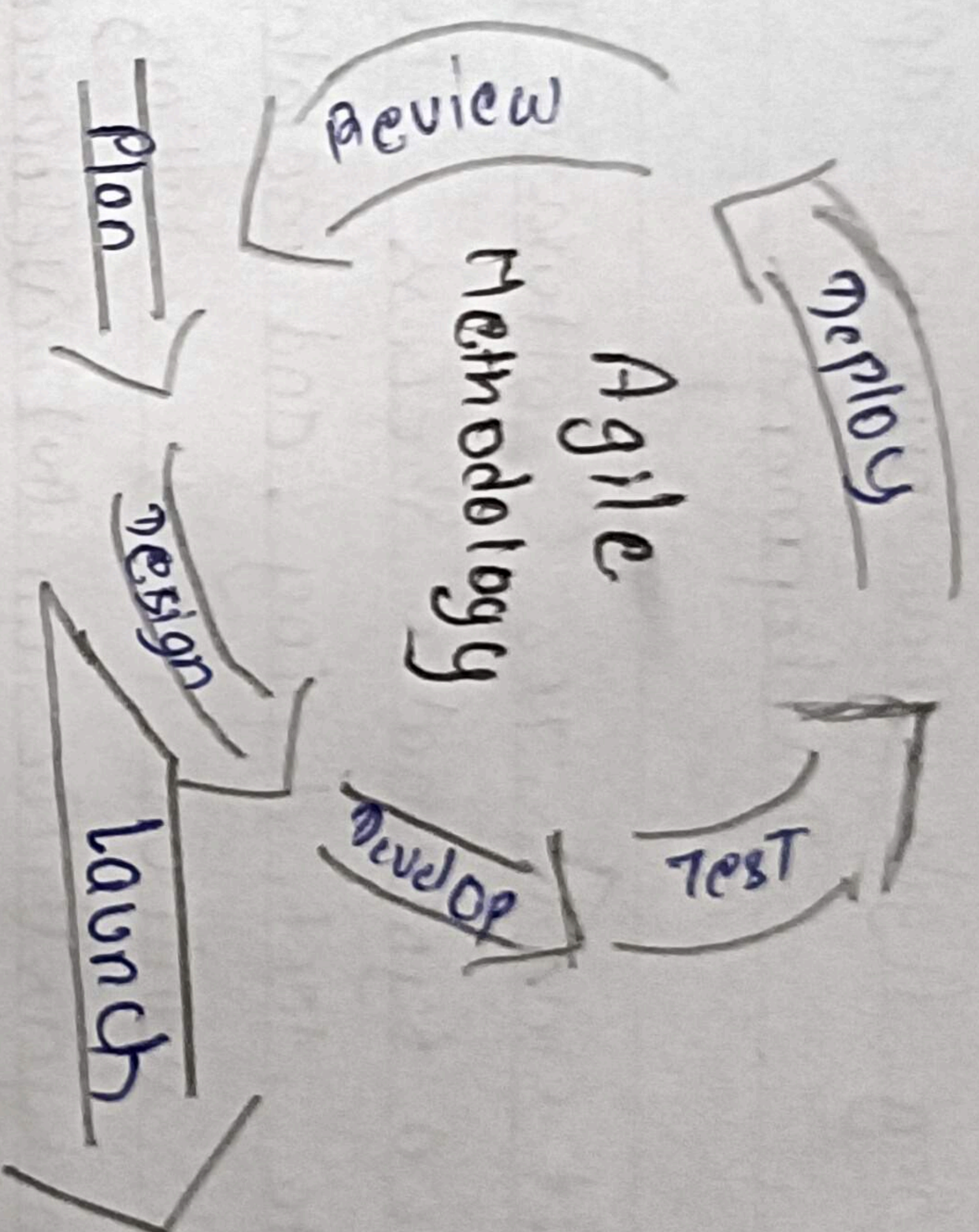
(i) Waterfall Model (ii) Agile Model

Waterfall Model :- A linear, sequential approach that's one of the oldest and most well-known SDLC models. In this model, the team must complete each phase of the project before moving on to the next.

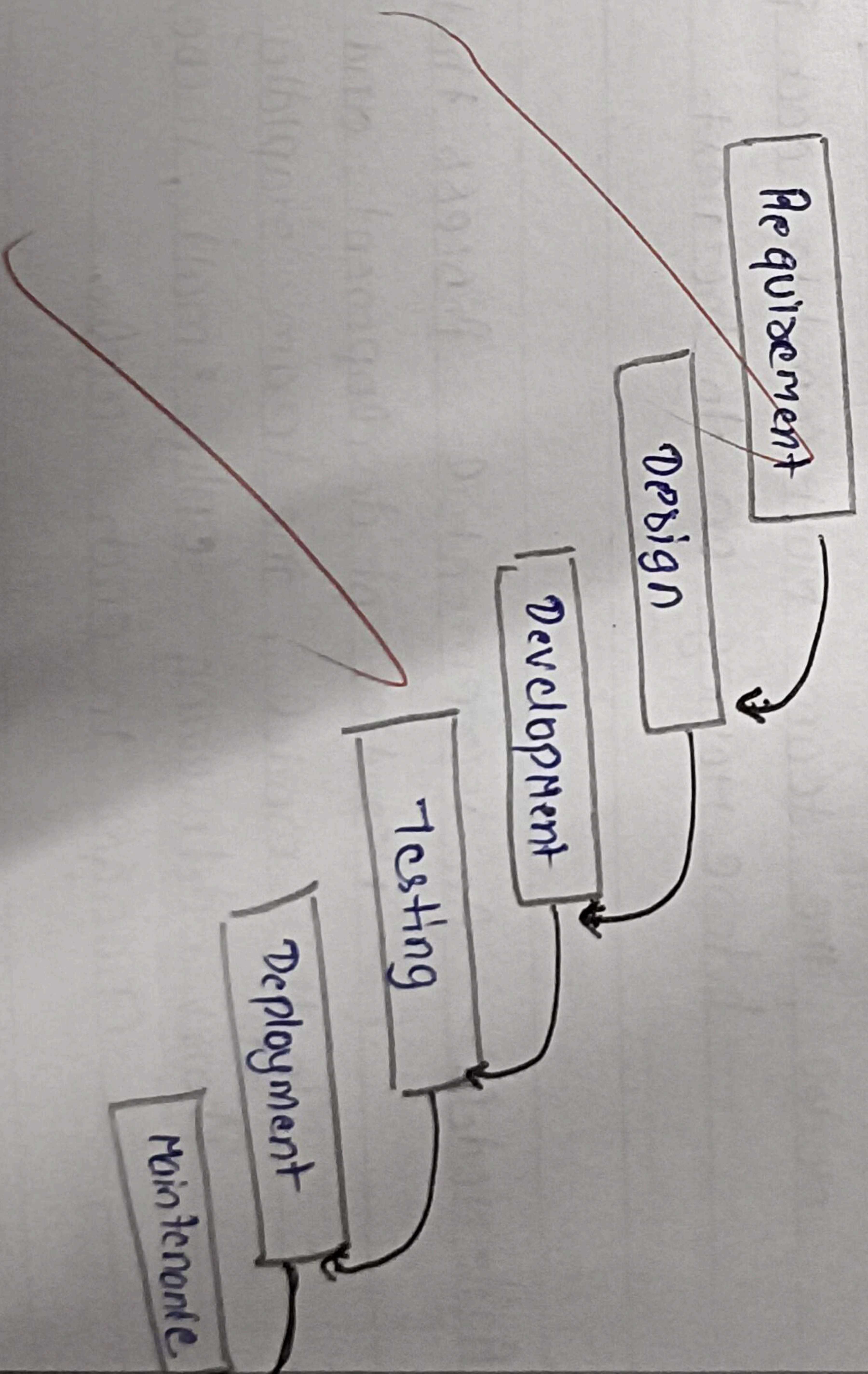
Agile Model :- An incremental process that promotes continuous iteration of development and testing throughout SDLC. In this model, the team rapidly iterates through the phases, delivering only small, incremental software changes in each cycle.

Difference between waterfall and Agile model :-

Agile Model



Waterfall Model



Waterfall Model	Agile Model
(i) Client input is required only after completing each phase	Client input is required throughout the product development.
(ii) Changes cannot be made after the completion of a phase	Changes can be made at any stage.
(iii) Coordination is not needed as one team starts the work after the finish of another team.	Coordination among project teams is required to ensure cohesiveness.
(iv) It is mainly used for small project	It is useful in large and complex project.
(v) It required a large team	Small team can be sufficient.
(vi) Cost of development is high	Cost of development is less.
(vii) Take more time compared to Agile	Takes less time as compared to waterfall.