1， SDLC stands for Software Development Life Cycle. It is a process followed by software development teams to create high-quality software products. The process includes several stages such as planning, requirements analysis, design, implementation, testing, and maintenance.

2，Waterfall is a traditional software development methodology where the development process follows a linear and sequential approach. Each stage of the software development process is completed before moving onto the next stage, and changes are difficult to make once a stage is completed.

3，Some different models under SDLC include:

Waterfall model

V-model

Iterative model

Spiral model

Agile model

4，Some different models under Agile include:

Scrum

Kanban

Extreme Programming (XP)

Lean Development

5，UML stands for Unified Modeling Language. It is a visual modeling language used in software engineering to create diagrams and models to describe software systems.

6，An architecture diagram for a project is a graphical representation of the high-level structure of the system or application. It shows the major components, their relationships, and how they interact with each other.

7，Deployment phase in SDLC is the final stage in which the software is deployed to the production environment, making it available for use by end-users.

8，Some types under Agile include:

Scrum

Kanban

Lean Development

Extreme Programming (XP)

Crystal Clear

9，In Agile Scrum, a sprint is a time-boxed period of development, typically one to four weeks long, during which a team works on a set of features or user stories.

10，ER diagram stands for Entity-Relationship diagram. It is a graphical representation of entities and their relationships to each other in a database.

11，The main difference between Waterfall and Agile methodology is that Waterfall is a linear, sequential approach to software development, while Agile is an iterative, flexible approach. Waterfall follows a strict process with little room for changes or updates, while Agile allows for changes and adaptations to be made throughout the development process. Agile is often more collaborative and involves more communication between team members and stakeholders, while Waterfall relies on a more hierarchical approach.