**Software Engineering Assignment**

**MODULE:1(SDLC)**

**Q-** **1.what is the software? what is software engineering**?

Software is consider to be collection of executable programming code associated libraries and documentation.

An software engineering is The programs and other operating information used by a computer.in software engineering is an engineering -based approach to software development . a software engineering is a person who apply the engineering design process to design ,development ,test, and evaluate computer software

**Q-2.Explain of software?**

**I . System software**

System software. These software programs are designed to run a computer's application programs and hardware. System software coordinates the activities and functions of the hardware and software. In addition, it controls the operations of the computer hardware and provides an environment or platform for all the other types of software to work in. The OS is the best example of system software; it manages all the other computer programs.

**II. Application software**

Application software. The most common type of software, application software is a computer software package that performs a specific function for a user, or in some cases, for another application. An application can be self-contained, or it can be a group of programs that run the application for the user. Examples of modern applications include office suites, graphics software, databases and database management program.

**III. Middleware software**

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 Excel and Word.

**Q-3.What is SDLC? Explain each phase of SDLC?**

A SDLC is a big -picture breakdown of all the steps involve in software creation ex planning, coding, testing, deploying, etc.....companies define custom SDLC to create a predictable, iterative framework that guides the time through all major stages of development

There are six types of phases in SDLC

**I)Requirement**

Thise phases involve gathering information about the software requirement

**II)Analysis phase**

To analysis the stakeholders such as customers end users and business analysis

**III) design**

In this phases the software design is created which include the overall architecture of the software

**4) implementation( coding)**

The design is the implemented in code usually in several iteration and in this phase

**5)Testing**

The software is thoroughly tested to ensure that it meets the requirement and work correctly.

**6) maintenance**

Thise phases includes ongoing support bug fixes and update to the software