# A picture containing furniture Description automatically generated

ICT

NAME: Amman Soomro

Section: SE-A

Roll No: 19K-1048

Lab

10

Assignment One

# Software Engineering:

Software engineering is the process of analyzing user needs and designing, constructing, and testing end user applications that will satisfy these needs through the use of software programming languages. It is the application of engineering principles to software development. In contrast to simple programming, software engineering is used for larger and more complex software systems, which are used as critical systems for businesses and organizations. (Quora)

# Application:

A software engineer takes the software needs of end users into account and consequently develops or designs new applications. Furthermore, software engineering may involve the process of analyzing existing software and modifying it to meet current application needs.

In modern consumer electronics, devices in direct competition often have similar hardware and processing power, but the user experience will vary greatly depending on the software being used.

They write code in one or more of the in-demand programming languages, including:

* Java
* PHP
* C++
* Python

# Difference Between Science and Engineering

|  |  |
| --- | --- |
| **Science** | **Engineering** |
| * Science is the study of systematically arranged facts that can be logically explained. * The question that’ll arise the most in science is “How does this happen?” Hence – Scientist. * Science is the foundation of Engineering. * Science seeks to explain phenomena through theory, hypothesis, and experiment, in an effort to ascertain natural laws.  For example: Chemistry investigates the structure of chemicals and their interaction. | * Engineering deals with the art of using scientific, mathematical and practical knowledge to design machines that are useful to man. * The question that’ll arise the most in engineering is “How do I make this work?” Hence – Engineer.      * Engineering is applied Science. * Engineering seeks to apply natural laws to the solution of practical problems.  For example: Chemical engineering might use the results of chemistry to come up with a better way of refining gasoline. |