**MIPS ARCHITECTURE OVERVIEW**

**LAB# 02**

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**CSE304L Computer Organization & Architecture**

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Class Section:

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“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

Submitted to:

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**Computer Architecture and Organization**

What is Computer Architecture and Organization?

Computer Organization and Architecture is the “**study of internal working, structure and implementation of a computer system”.**

**MIPS Architecture Overview:**

The MIPS architecture is a Reduced Instruction Set Computer (RISC). This means that there are smaller number of instructions that use a uniform instruction encoding format.

**Two Types OF Architecture:**

1. RISC
2. CISC
3. **RISC:**

RISC (reduced instruction set computer) is a microprocessor that is designed to perform a smaller number of types of computer instructions so that it can operate at a higher speed.

1. **CISC Architecture:**

CISC (complex instruction set computer) a computer in which individual instructions may perform many operations and take many cycles to execute.

**QTSPIM Software:**

It is the latest version of SPIM. QtSpim is software that will help you to simulate the execution of MIPS assembly programs. It does a context and syntax check while loading an assembly program.

**QtSpim workspace:**

