# DELHI TECHNOLOGICAL UNIVERSITY



**Subject: ECE208 Computer Architecture(CA)** 

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## <u>Objective</u> –

To write the VHDL code for the *MIPS*(*Microprocessor* without interlocked pipelined stages) *Processor* and perform simulation.

## <u>Work Plan</u> –

Firstly, we will use the instruction set and architecture design for the MIPS processor(MIPS is a RISC processor) provided on the internet. Based on the provided instruction set, we will design and implement the data path and control unit. After completing the design for the MIPS processor, we will write the code for the whole design of the MIPS processor. After that we will verify the code by doing simulations in order to see how the MIPS processor works.

# Software required-

ModelSim or Xilinx ISE

## **Applications** -

The Microprocessor without Interlocked Pipeline Stage (MIPS) microprocessor is one of the world's most popular processors for embedded applications.

MIPS microprocessor can be found in applications ranging from hard disk controllers to laser-jet printers to gaming consoles and audio applications in consumer devices.