**Ramaiah Institute of Technology**

**(Autonomous Institute, Affiliated to VTU)**

**Department of CSE**

**Course:** Computer Organization Lab **Course Code: CS45**

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| Sl. No | Exercise |
| 1 | Demonstrate Datapath and instruction execution stages using MarieSim Simulator |
| 2 | Write an ARM program to find the sum of all elements of an array using ARMsim. |
| 3 | Write an ARM program to find the factorial of a number using ARMsim |
| 4 | Write an ARM program to copy one string into another string using ARMsim |
| 5 | Design an 8-bit ALU to perform various functions using Logisim simulator. |
| 6 | Design a memory system using Logisim simulator. |
| 7 | Write a MIPS program to find whether the given number is prime number or not using QtSpim simulator. |
| 8 | Write a MIPS program to reverse a given string using QtSpim simulator. |

**Question Bank for Lab Internal**

Write Up: 5 marks Execution: 8 marks

Viva: 2 marks Lab Record :5 marks