**Title:** Prepare an Animated video of maximum 10 minutes and upload the same on class’s YouTube channel.

**Topics are as follows:**

1. Complete instruction execution with example. **Add R1,R2**
2. Booth’s algorithm implementation with flowchart
3. Division restoring algorithm implementation with flowchart
4. Cache memory
5. Virtual memory
6. Working of Interrupt Driven I/O
7. Working of DMA Transfer
8. Bus Arbitration techniques
9. What is serial and parallel processing and Flynn’s classification
10. Use of Address Bus, Data Bus and Control bus in Von Neumann Architecture
11. Basic Instruction execution cycle
12. Use of MAR and MDR in memory access i. Read operation of memory ii Write operation
13. Instruction pipe line implementation and advantages of Instruction pipeline

**Instructions:**

1. You can prepare animated video or can make use of PowerPoint presentation for preparing a video.

2. Make sure that all group members are actively involved in this activity.

3. Group leader has to upload video **on class YouTube Channel on or before 30th April 2023**

4. We suggest using a high-quality microphone and record with a minimally-distracting background for the best quality.

5. Assessment of the assignment will be based on contents covered, knowledge gained and peer level review like number of views, likes and comments on the video.