

# Project Compressed Instructions

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Compressed instructions are a set of instructions which are of 16 bit length in the RISC-V architecture. The compressed instructions are represented by the character "C" in RISC-V specifications.

In this project, the team needs to add compressed instruction extension (C extension) to the core (aqlrv32). Originally the core supports I and M extensions.

## Team Members

- Nadeem Asghar
- Areeba Zahid
- Soban Ahmed

## Project Details and Task Distribution

If team members accomplish these segments ahead of schedule, this task distribution is adjusted accordingly. They can begin working on the following section regardless of the time frame outlined below.

Concisely divide the task done to be done every member between team. Team work is valued.

### 3-days

- Understand the RTL & infrastructure
- Get a concise plan ready aided with Block Diagrams for the blocks that need to be included in the RTL.

### 1-day

- Detailed verification plan
- Discussion of the Issues (If any) and design verification plan.

### 6-days

- Get the RTL & updated infrastructure
- Write tests and verify the implementation
- Complete the coverage of core.

## Takeaways

- Every team member should have the understanding of the project and other team member work.

## Project Timeframe

- Time frame of the project is two weeks.

## Meetings Times

- Meetings can be called anytime by project Leads/Members. If project leads are not available at that time then meeting can be delayed.

## Resources

- Resources for the project can be cloned from the following links.

```
https://github.com/aamir-sultan/aqlrv32-setup.git
```

```
https://github.com/aamir-sultan/aqlrv32.git
```

- Clone the repos. One repo contains the setup process and the other repo contains the core.
- Compressed instructions [reference](#).