

## Lab Session 1

### Algorithms and Computational Thinking

#### Exercise I

The first exercise has three sub sections; the previous step has to be completed before proceeding to the next.

1. Write three values of different data types in the memory (use byte, halfword and word). Refer the manual of eduMIPS64 and select values such that they are suited for a particular data type.
2. Move them to registers r1, r2 and r3 respectively.
3. Increment the content of register r1 by 1 and move it back to the memory.

Consult the **eduMIPS main guide** to find the instructions not covered in the tutorial.

#### Exercise II

Write a program to print Hello World! in three programming languages, namely; Python, Scala and Swift. Use the IntelliJ IDE with the python and scala plugins to write python and scala program and Xcode for writing the swift program. Refer the manuals to create a project in each and run the program.

#### Exercise III

Write a program (python, scala, swift) to take two user input numbers (integers), compute their product and display the result.

Sample Output:

```
Enter first number: 5
Enter second number: 6
The product is: 30
```