

## GenerateInstr.pl Usage

GenerateInstr.pl : This perl code is provided to help you create the necessary input instruction values. It can be run in the following manner

```
> perl ./GenerateInstr.pl ADD R5, R4, R1
```

which will give you the instruction in hex at the end. Other variations are

```
> perl ./GenerateInstr.pl AND R2, R5, R7
```

```
> perl ./GenerateInstr.pl NOT R3, R1
```

```
> perl ./GenerateInstr.pl ADD R2, R5, #28
```

```
> perl ./GenerateInstr.pl LEA R6 #507
```

The penultimate instruction in the above list corresponds to ADD R2 R5 #-4. The last instruction is LEA R6 #-5. Remember to put the pound sign. Also note that the immediate values need to be from 0 - 31 for the ALU case and 0-512 for LEA given that I have not modeled the usage of sign here. (lazy). Please go ahead and use the equivalent unsigned 5 bit version as an input for the ALU instructions. For example, use 28 (1\_1100) which is actually -4 if you consider the last bit to be the sign. Therefore "ADD R2, R3 , #-4" would be put in as "ADD R2, R3 , #28". The same logic holds for LEA instructions.