

<b>EXP NO: 3</b>	<b>Perform ALU operations</b>
<b>DATE</b>	

**AIM:**

1. To write 8051 Assembly Language Program for Perform ALU operations using Keil simulator and Execute it.

**SOFTWARE REQUIRED:**

<b>S.No</b>	<b>Software Requirements</b>	<b>Quantity</b>
1	Keilµvision5IDE	1

**PROCEDURE**

1. Create a new project, go to “Project” and close the current project “Close Project”.
2. Next Go to the Project New µ Vision Project and Create New Project Select Device for Target.
3. Select the device AT89C51ED2 or AT89C51 or AT89C52
4. Add Startup file next go to “File” and click “New”.
5. Write a program on the editor window and save it with .asm extension.
6. Add this source file to Group and click on “Build Target” or F7.
7. Go to debugging mode to see the result of simulation clicking Run or step run.

### **PROGRAM:**

```
ORG 0000H
CLR C
//ADDITION
MOV A, #20H
ADD A, #21H
MOV 41H, A
```

```
//SUBTRACTION
MOV A, #20H
SUBB A, #18H
MOV 42H, A
```

```
//MULTIPLICATION
MOV A, #03H
MOV B, #04H
MUL AB
MOV 43H, A
```

```
//DIVISION
MOV A, #95H
MOV B, #10H
DIV AB
MOV 44H, A
MOV 45H, B
```

```
//AND
MOV A, #25H
MOV B, #12H
ANL A, B
MOV 46H, A
```

```
//OR
MOV A, #25H
MOV B, #15H
ORL A, B
MOV 47H, A
```

```
//XOR
MOV A, #45H
MOV B, #67H
XRL A, B
MOV 48H, A
```

```
//NOT  
MOV A, #45H  
CPL A  
MOV 49H, A  
END
```

**OUTPUT:**

**RESULT:**