Student Name:	Lab 11

Implement the following procedure in MIPS.
Use $s0, $s1, $s2 registers for f, k and sum variables. This means you will need to push $s0,$s1,and $s2 to the stack at the beginning of the procedure and pop them off at the end of the procedure. Also, make sure you return the sum in $v0.

```
int sum_proc(int g, h, i, x) {
    int f;
    int k;
    int sum;
    f = (g + h);     /* Assign value to $s0 */
    k= (i + x)*2;    /* Assign value to $s1 */
    sum=f+k;         /* Assign value to $s2 */
    return sum;
}
```

Define the following in your data section:

```
.data
      g:     .word  10
      h:     .word  15
      i:     .word  3
      x:     .word  2
      test:  .word  56
     test2:  .word  78
     test3:  .word  91
```

In your main line code,

- load g,h,i, and x into $a0-$a3 registers.
- Load the value of test into $s0, test2 into $s1, and test3 into $s2.
- Call sum_proc, passing g,h,i, and x into the procedure (in $a0-$a3)
- Print the value returned from sum_proc.
- Finally, print the value in $s0,$s1, and $s2 to make sure it has been restored from the stack in your procedure.

Example Execution:

```
Returned value = 35
s0 = 56
s1 = 78
s2 = 91
```

The following is required for all assignments and is included in the rubric for grading:

- You need to name your file as “LastName-Name-Lab11.asm” (Example: Talley-Michelle-Lab11.asm)
- Your program will need to have the exact output unless otherwise stated.
- Your source needs to have comments that explain your implementation.
- Your procedures need to begin with a standard comment section.
- You need to include the following set of comments at the top of your source code for all assignments.

Lab

#Your Name
#Assignment # (Example: Lab #11)

- You need to submit your source code on blackboard.
- Please submit your files in a zip file named LastName-FirstName- Lab11.zip) and make sure you include any files that are used as includes in the zip file (Example: utils.asm).