

We'll be using regular calls and a "Conditional Call" called "ce" or **Call if Equal**, like jmps calls can use results from a compare (cmp).

```
...Sub:
  sub #Param1,#Param2
  call Out
  ret

Out:
  out 3,#Param1
  ret
```

Now this program is pretty useful... but to be really useful as a general calculator it needs the basic 4 functions... so far we only have 2! So we need to "ADDZ MAOR FUNKSHUNS!" So let's "plug in" **mul** (Multiply) and **div** (Divide)!

Since the program is modularized we only need to add a pair of code bits that will do our bidding and then just tweak the code slightly.

```
...Add: //no change here!
  add #Param1,#Param2 //Remember math functions save result in 1st parameter of the instruction.
  call out
  ret

Sub: //Getting warmer!
  sub #Param1,#Param2
  call out
  ret

Mul: //add Mul with the code
  mul #Param1,#Param2
  call Out
  ret

Div: //add Div with its code!
  div #Param1,#Param2
  call Out
  ret

Out: //We don't need to adjust this one!
  out 3,#Param1 //since results are stored in Param1
  ret //we don't have to change anything here. Whoa!
```

Let's pretend that there are only 4 registers. In this program, we'll take inputs, report the states of the ports AND output an average.

```
...Output: //Remember, we still have a ret to do!
  pop edx //Remember the order that you pushed values onto the stack...
```

```
pop ecx //when you pop them, they'll be in reverse order...
pop ebx //so pay attention to that!
pop eax //Now we have restored the register states!
mov port0,eax //Output the port states
mov port1,ebx
mov port2,ecx
mov port3,edx
mov port4,#Avg //Output the results of the Averaging
push #Savstk //Put the return address back on TOP of the stack!
ret //Bingo!
```