

NEGATIVE NUMBERS:

```
;;Start program and Load Output
begin:      LOD z
;;Subtract x from the Accumulator
           SUB x
;;Store the Output
           STO z
;;Load y to the Accumulator
           LOD y
;;Subtract one from accumulator
           DEC
;;Store y
           STO y
;;If Accumulator value is 0, quit and go to begin
           JMZ quit
;;Go to begin
           JMP begin
x:3
y:2
z:0
quit: HLT
```

ZERO:

```
;;Start program and Load Output
begin:      LOD z
;; Add x  from the Accumulator
           SUB x
;;Store the Output
           STO z
;;Load y to the Accumulator
           LOD y
;;Subtract one from accumulator
           DEC
;;Store y
           STO y
;;If Accumulator value is 0, quit and go to begin
           JMZ quit
;;Go to begin
           JMP begin
x:0
y:2
z:0
quit: HLT
```

REMAINDER:

```
;;Start the code
```

```

begin:
;;Load the output
    LOD x
;;Subtract y from the Accumulator
    SUB y
;;quit if y is less than 0
    JMN quit
;;Store the output
    STO x
;;Load z into AC
    LOD z
;;Increase z to the Accumulator
    INC
;;Store z
    STO z
;;Start Over
    JMP begin
;;Stop
    HLT

```

```

x: 11 (dividend but turns into where the remainder is stored at the
end)
y: 5 (divisor)
z: 0 (quotient)
quit: HLT

```