

**Write a program in our new assembler to write the first 10 Fibonacci numbers to port 255.**

0 + 1 + 1 + 2 + 3 + 5 + 8 + 13 + 21 + 34

```
sum = 0;
current = 0;
next = 1;
while(...) {
    print to 255;
    sum = current + next;
    current = next;
    next = sum;
}
```

	JMP	start	
sum:	0		
current:	0		
next:	1		
limit:	10		
start:	LOAD	sum	
	WRITE	255	
	ADD	current	
	ADD	next	
	STORE	sum	
	LOAD	next	; load the value of next
	STORE	current	; store the value of next in current
	LOAD	sum	; load the value of sum
	STORE	next	; store the value of sum in next
	LOAD	limit	; load the value of limit
	SUB	1	; subtract the limit by 1
	STORE	limit	; store the value as limit
	JLZ	start	; checks if limit is 0 and if not jump back to start
end:	JMP	end	; if limit is 0 end