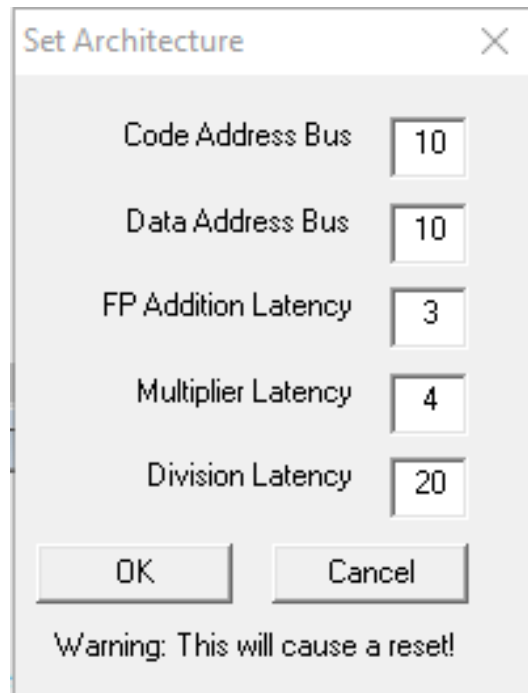


P1 & P2 Reports

by Keegan Goecke

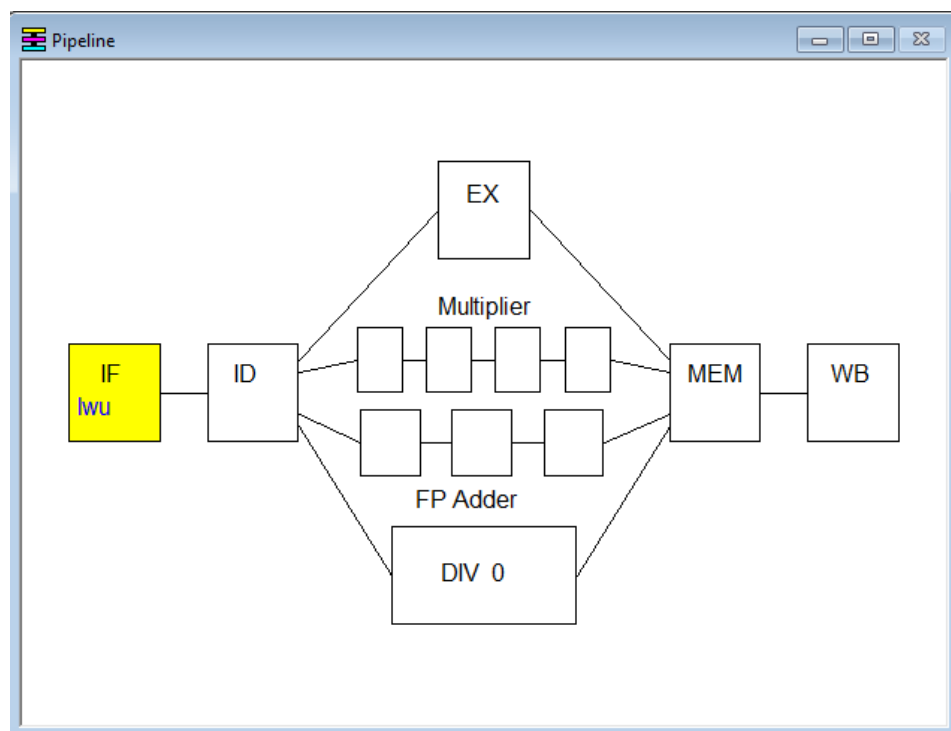
All test were ran with the following configurations, as well as forwarding enabled:



A dialog box titled "Set Architecture" with a close button (X) in the top right corner. It contains five input fields for configuration parameters:

- Code Address Bus: 10
- Data Address Bus: 10
- FP Addition Latency: 3
- Multiplier Latency: 4
- Division Latency: 20

At the bottom, there are "OK" and "Cancel" buttons. Below the buttons is a warning message: "Warning: This will cause a reset!"

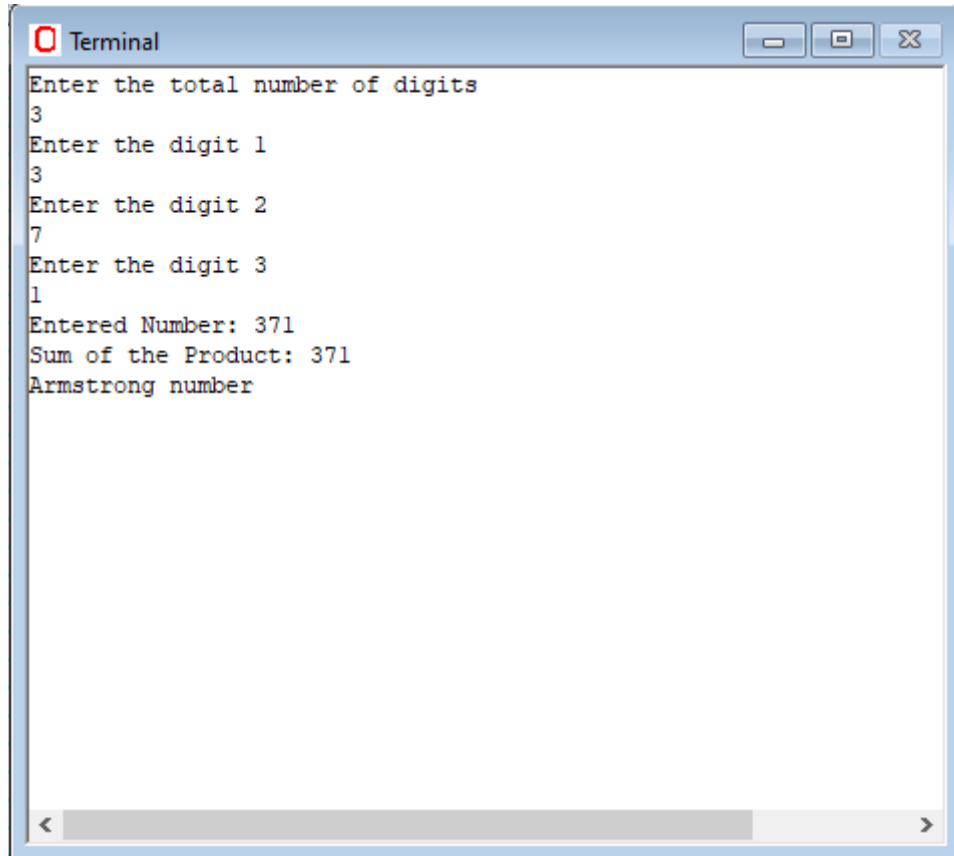


Problem 1:

Test 1:

Input: 371

Results:



```
Terminal
Enter the total number of digits
3
Enter the digit 1
3
Enter the digit 2
7
Enter the digit 3
1
Entered Number: 371
Sum of the Product: 371
Armstrong number
```

Execution Stats	
Number of Cycles	155 Cycles
Number of Instructions	117 Instructions
Cycles Per Instruction (CPI)	1.325

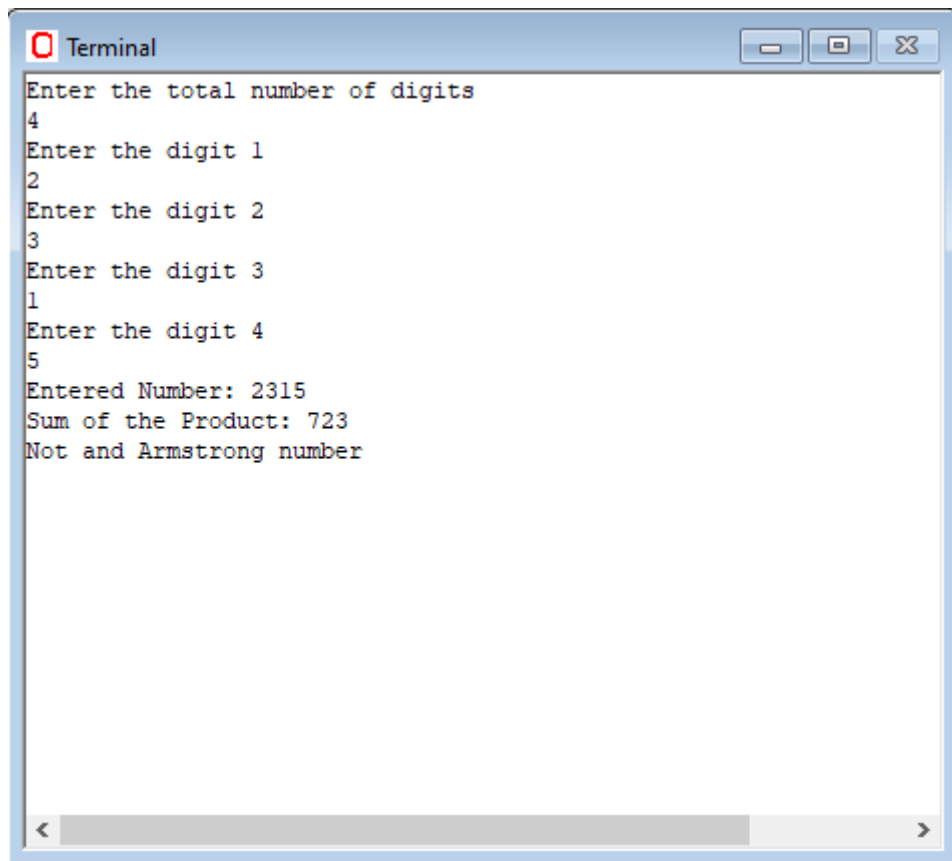
Stalls	
RAW	19
WAW	0
WAR	0
Structural	12
Branch Taken	9
Branch Misprediction	0

Code size: 240 Bytes

Test 2:

Input: 1234

Results:



```
Terminal
Enter the total number of digits
4
Enter the digit 1
2
Enter the digit 2
3
Enter the digit 3
1
Enter the digit 4
5
Entered Number: 2315
Sum of the Product: 723
Not and Armstrong number
```

Execution Stats	
Number of Cycles	215 Cycles
Number of Instructions	158 Instructions
Cycles Per Instruction (CPI)	1.361

Stalls	
RAW	29
WAW	0
WAR	0
Structural	20
Branch Taken	16
Branch Misprediction	0

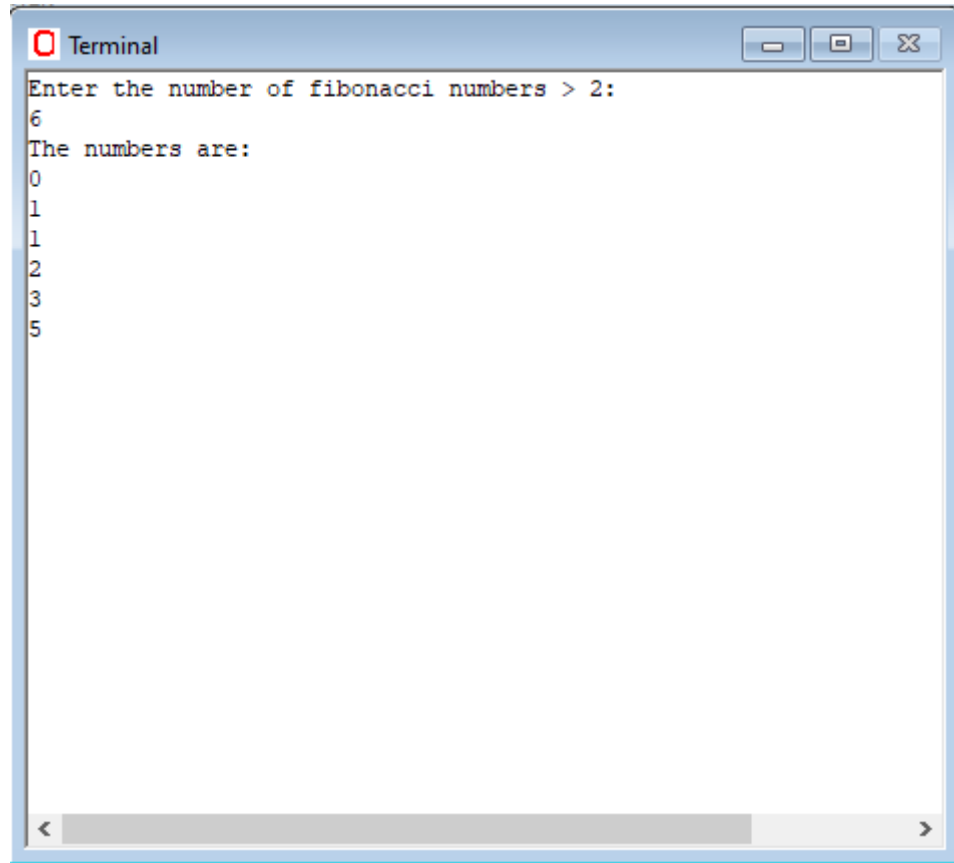
Code Size: 240 Bytes

Problem 2:

Test1:

Input: 6

Results:



```
Terminal
Enter the number of fibonacci numbers > 2:
6
The numbers are:
0
1
1
2
3
5
```

Execution Stats	
Number of Cycles	69 Cycles
Number of Instructions	58 Instructions
Cycles Per Instruction (CPI)	1.190

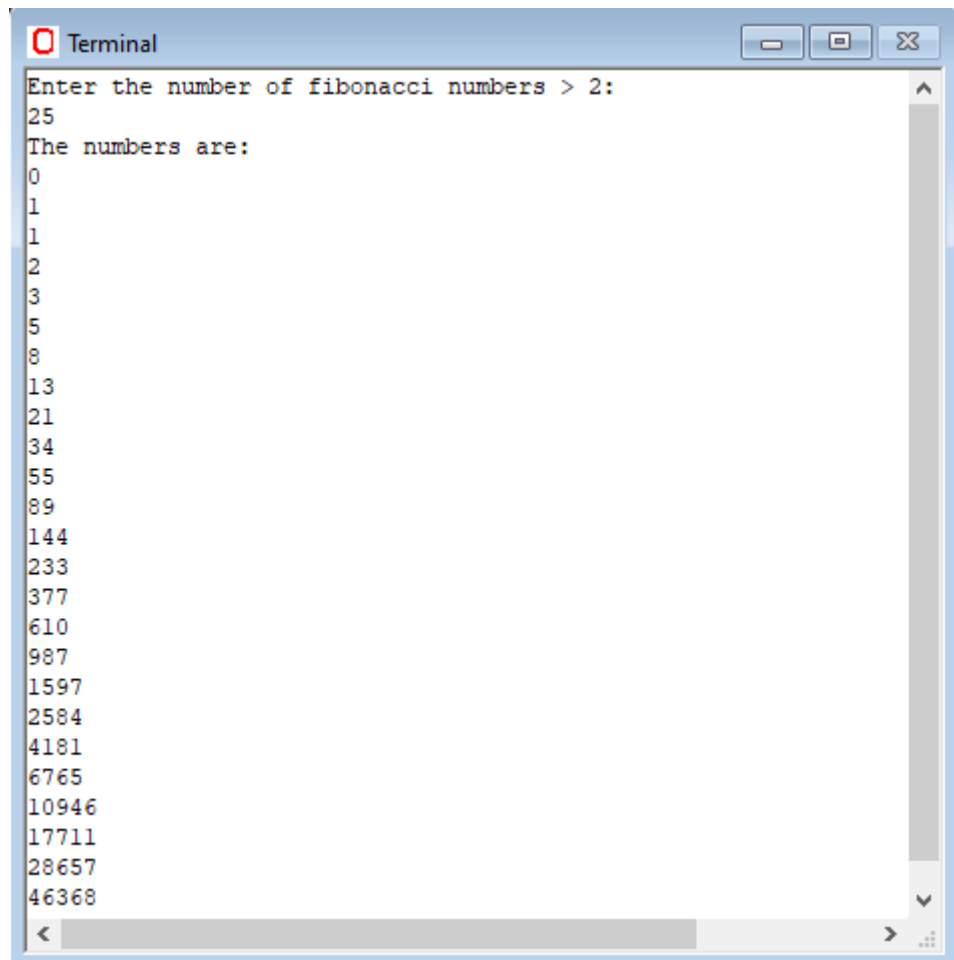
Stalls	
RAW	1
WAW	0
WAR	0
Structural	0
Branch Taken	6
Branch Misprediction	0

Code Size: 148 Bytes

Test 2:

Input: 25

Results:



```
Terminal
Enter the number of fibonacci numbers > 2:
25
The numbers are:
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
610
987
1597
2584
4181
6765
10946
17711
28657
46368
```

Execution Stats	
Number of Cycles	240 Cycles
Number of Instructions	210 Instructions
Cycles Per Instruction (CPI)	1.143

Stalls	
RAW	1
WAW	0
WAR	0
Structural	0
Branch Taken	25
Branch Misprediction	0

Code Size: 148 Bytes