

Homework 5

Casey Bates

10 May 2020

3 Theta (θ)

10 bits of $a_{out}[2][3][11...20]$:

1001100010

4 Rho (ρ)

10 bits of $a_{out}[2][3][11...20]$:

0100001101

5 Pi (π)

10 bits of $a_{out}[2][3][11...20]$:

1000000110

```
Crypto — -bash — 80x24
[CaseysMTouchbar:crypto caseybates$ g++ sha3.cpp
[CaseysMTouchbar:crypto caseybates$ ./a.out
Theta:
0011011000
0011011000
a[2][3][11...20]: 1001100010

Rho:
0110011001
0110011001
a[2][3][11...20]: 0100001101

Pi:
0110110001
0110110001
a[2][3][11...20]: 1000000110
CaseysMTouchbar:crypto caseybates$
```

Figure 1: Sample Output