Shell and bash code

1. Min: 0.00 V Max:3.40V
2. Period: 234.6ms
3. It is 134.6ms away from 100ms
4. They differ because one you have two sleeps which would delay for 200ms instead of 100ms and that the code itself takes time to execute.
5. CPU 2.6% MEM 0.5%
6. Shortest period 39.88ms

|  |  |
| --- | --- |
| Period | CPU% |
| 39.88ms | 26.1 |
| 55.34ms | 12.7 |
| 134.8ms | 5.2 |
| 234.7ms | 2.6 |
| 1.035s | 2.0 |

1. The period is stable at low frequencies, but as it gets higher the stability decreases greatly.
2. Not very stable
3. Yes it did impact the period but not by much.
4. Yes the period shortened by about 10ms.
5. The shortest period with sh is 26.10ms

Python code

1. Min: 0.00V Max: 3.48V
2. Period of 100.6ms (expected period of 100ms)
3. It is 0.6ms away from 100ms
4. Mostly due to the time it takes to execute the code
5. CPU: 0.7% MEM: 1.0%
6. Shortest period 160us

|  |  |
| --- | --- |
| Period | CPU% |
| 160us | 76.1 |
| 660us | 41.6 |
| 1.370ms | 22.8 |
| 2.364ms | 13.7 |
| 20.82ms | 3.8 |

1. The period is stable at low frequencies, but as it gets higher the stability decreases greatly.
2. More stable than the shell and bash but still not very stable.

C code

1. Min: 0.00V Max: 3.48V
2. Used 20000us and got 20.32ms
3. For 100ms I got 100.4ms
4. Must likely due to code execution time
5. CPU: 0.5% MEM: 0.2%
6. Shortest period 274.8us

|  |  |
| --- | --- |
| Period | CPU% |
| 274.8us | 56.0 |
| 557.2us | 31.7 |
| 773.2us | 21.2 |
| 2.286ms | 8.6 |
| 10.29ms | 2.8 |