As the quality manager at Excellent Manufacturing Company, the Drilling Supervisor has just explained a problem for the drilling of a 2.000" hole in a flange plate. The specs call for 2.000 +/- 0.005.  It seems that the process has been producing holes that are a little too big on the average. You decide to investigate and see what the process is doing. The next run of this part is scheduled to take place in two days. You instruct the Supervisor to get a sample of the parts after the hole is drilled and record the hole size.  The supervisor does so and the following table shows the recorded data for 60 parts.

|  |  |  |  |
| --- | --- | --- | --- |
| 2.002 | 2.003 | 2.003 | 2.003 |
| 2.003 | 2.004 | 2.006 | 2.002 |
| 2.001 | 1.999 | 1.995 | 2.002 |
| 2.002 | 2.000 | 1.999 | 2.003 |
| 2.003 | 2.001 | 2.002 | 1.998 |
| 2.006 | 2.001 | 1.999 | 2.005 |
| 2.000 | 2.004 | 2.003 | 2.002 |
| 1.998 | 2.005 | 2.001 | 2.003 |
| 2.001 | 2.006 | 2.000 | 2.001 |
| 2.001 | 2.005 | 2.004 | 2.004 |
| 2.002 | 2.003 | 2.004 | 2.001 |
| 2.002 | 2.001 | 2.006 | 2.006 |
| 2.007 | 2.004 | 2.002 | 2.005 |
| 2.003 | 2.000 | 2.002 | 2.003 |
| 2.004 | 2.005 | 1.999 | 2.005 |

**Assignment:** Develop a histogram of the data. Analyze the shape of the data and calculate the average or mean of the sample.

**Assignment Expectations:** What do you conclude about the drilling process based on this histogram of the sample from the process?