```
C:\Users\Karthik\source\repos\ProgA_2\Debug\ProgA_2.exe 10000 200 1000 0.1 0.1 J L data1 100

Johnson-Lindenstrauss Lemma Demo
Reading a (10000 x 1000) Matrix from file 'JL_data1'
Reduced Dimension = 200
epsilon = 0.1
delta = 0.1
Reduced Dimension (i.e. 200) should be >= 922 for the bound to hold with probability 0.9
'C

C:\Users\Karthik\source\repos\ProgA_2\Debug\ProgA_2.exe 10000 200 1000 0.1 0.1 J
L_data1 10
Johnson-Lindenstrauss Lemma Demo
Reading a (10000 x 1000) Matrix from file 'JL_data1'
Reduced Dimension = 200
epsilon = 0.1
delta = 0.1
Reduced Dimension (i.e. 200) should be >= 922 for the bound to hold with probability 0.9
It took 0.123483 minutes to read data from file 'JL_data1'
#Trails for the testing-phase = 10
It took 0.0047 minutes for testing to be completed
Johnson-Lindenstrauss Lemma is satisfied 10-many times over 10 attempts
Empirical Probability = 1(Theory says it should be at least: 0.9 .) provided k is more than lower limit imposed onn itEmperical Probability > 1-delta
C:\Users\Karthik\source\repos\ProgA_2\Debug\
```

Above is a screenshot of running the program using the command prompt and it is shown to verify the JL Lemma

The output obtained is the Empirical probability which is 1. The reduced dimension k used as an input is 200.