**Output** **BinaryVsLinear**:  
1 1.0 2.0  
2 1.5 3.0  
3 2.0 3.0  
4 2.5 3.75  
5 3.0 4.0  
6 3.5 4.166666666666667  
7 4.0 4.142857142857143  
8 4.5 4.625  
9 5.0 4.888888888888889  
10 5.5 5.1  
11 6.0 5.181818181818182  
12 6.5 5.333333333333333  
13 7.0 5.384615384615385  
14 7.5 5.428571428571429  
15 8.0 5.4  
16 8.5 5.6875  
17 9.0 5.882352941176471  
18 9.5 6.055555555555555  
19 10.0 6.157894736842105  
20 10.5 6.3  
21 11.0 6.380952380952381  
22 11.5 6.454545454545454  
23 12.0 6.478260869565218  
24 12.5 6.583333333333333  
25 13.0 6.64  
26 13.5 6.6923076923076925  
27 14.0 6.703703703703703  
28 14.5 6.75  
29 15.0 6.758620689655173  
30 15.5 6.766666666666667

**Graph and Java Class in zip file**

**Question 4:** Linear search is more efficient than binary search for array sizes smaller than 9.

**Question 5:** Binary search is more efficient than linear search for array sizes greater than or equal to 9.