Assignment 1

24/08/20

**Q1 (a)**

**Q1 (b)**

|  |  |  |
| --- | --- | --- |
| θ | |  | | --- | |  | |
| 0.1 | 0.00059049 |
| 0.2 | 0.00262144 |
| 0.3 | 0.00453789 |
| 0.4 | 0.00497664 |
| 0.5 | 0.00390625 |
| 0.6 | 0.00221184 |
| 0.7 | 0.00083349 |
| 0.8 | 0.00016384 |
| 0.9 | 7.29E-06 |
| 1 | 0 |

A close up of a map

Description automatically generated  
θ=0.4 is most likely to generate the observed outcome X=[1,0,0,0,1,0,0,1] .

**Q2**

Distance = d(A, B) = 1 - Jaccard index (A, B) = 1 -JSim(A, B) = 1 - = 1 -