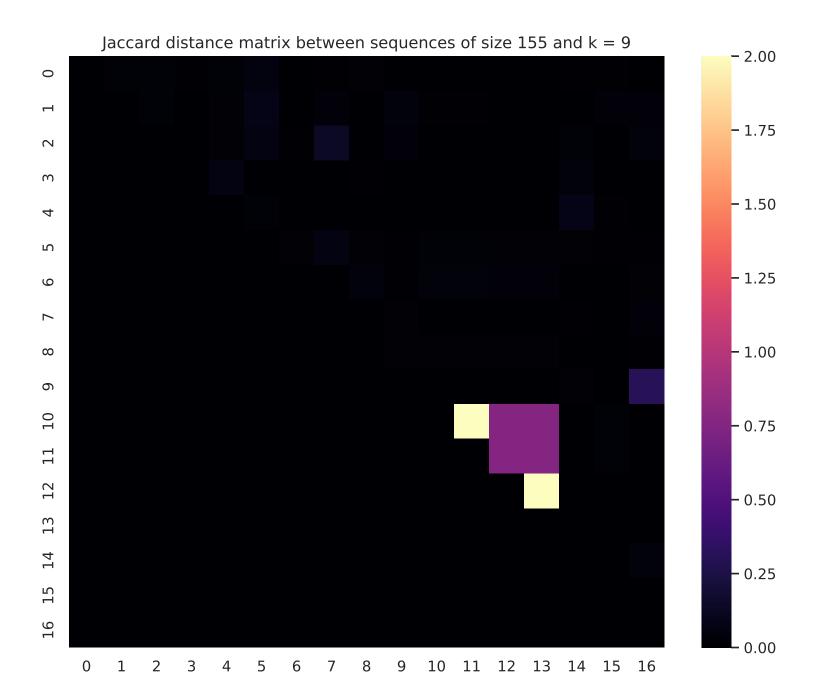


Jaccard distance matrix between sequences of size 174 and k=9- 0.25 - 0.20 0 - 0.15 - 0.10  $\vdash$ - 0.05 0.00 0 1

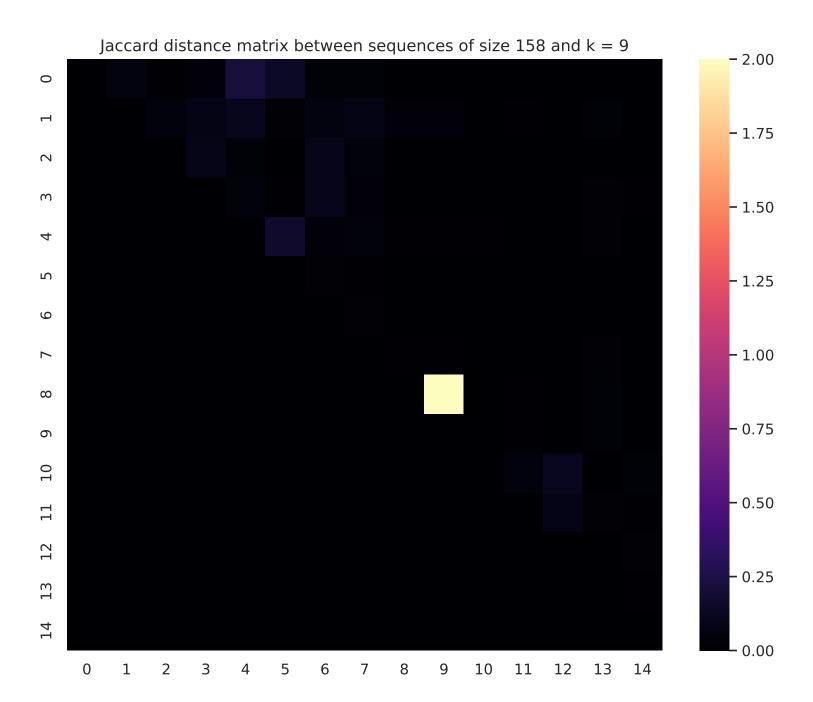
Jaccard distance matrix between sequences of size 159 and k = 9- 0.10 0  $\vdash$ - 0.08  $\sim$  $\sim$ - 0.06 4 - 0.04 2 9 - 0.02 /  $\infty$ L 0.00 3 6 1 2 4 5 7 8 0

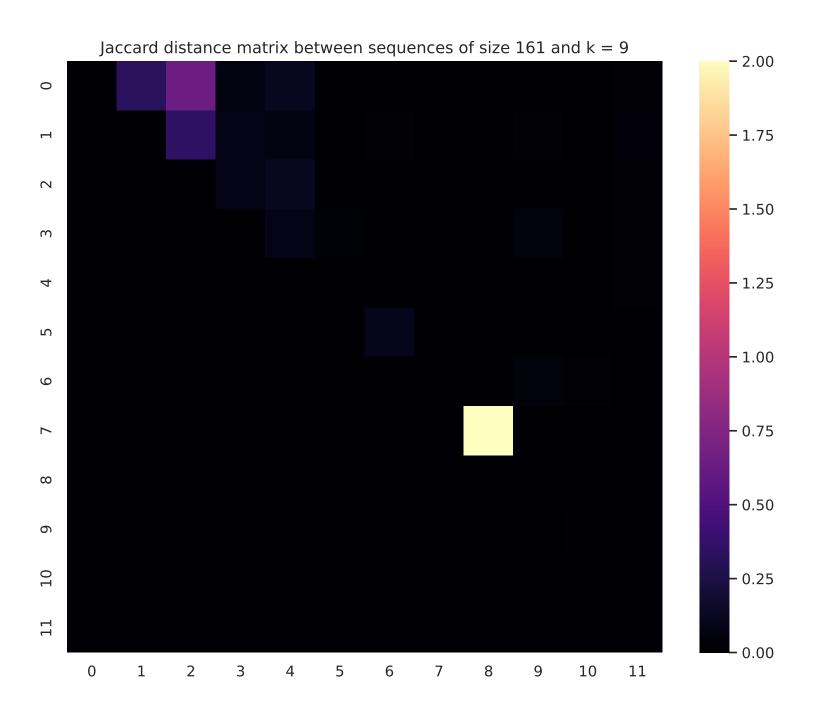
Jaccard distance matrix between sequences of size 156 and k = 90  $\vdash$ - 0.20 7  $\sim$ 4 2 - 0.15 9 /  $\infty$ - 0.10 0 10 12 - 0.05 13 14 15 L 0.00 6 0 1 2 3 4 5 10 11 12 13 14 15

Jaccard distance matrix between sequences of size 160 and k = 90 - 0.40  $\vdash$ - 0.35 7 - 0.30  $\sim$ - 0.25 4 2 - 0.20 9 - 0.15 / - 0.10  $\infty$ 0 - 0.05 10 0.00 1 2 3 5 7 0 4 9 10



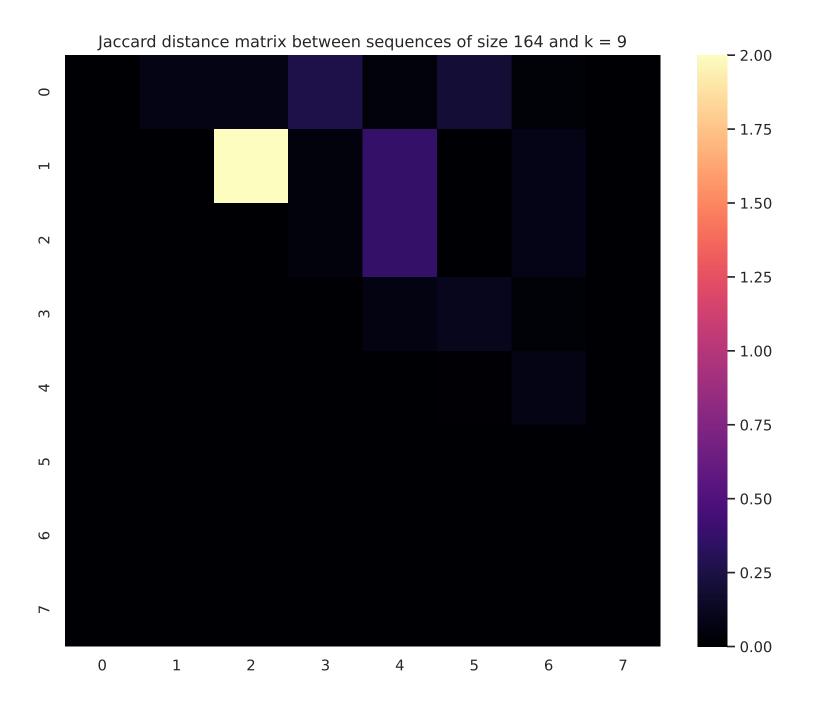
Jaccard distance matrix between sequences of size 154 and k=9- 0.35 0  $\vdash$ - 0.30 7 - 0.25  $\sim$ - 0.20 4 - 0.15 2 9 - 0.10 / - 0.05  $\infty$ 0.00 3 1 2 4 5 6 7 8 0





Jaccard distance matrix between sequences of size 169 and k = 90 - 0.12 - 0.10  $\vdash$ - 0.08 2 - 0.06  $\sim$ - 0.04 - 0.02 0.00 3 0 1 2 4

Jaccard distance matrix between sequences of size 152 and k = 9- 0.25  $\vdash$ - 0.20  $\sim$ - 0.15 /  $\infty$ - 0.10 - 0.05 L 0.00 3 4 



Jaccard distance matrix between sequences of size 140 and k = 90 - 1.0  $\vdash$ 7  $\sim$ - 0.8 4 2 9 - 0.6 /  $\infty$ 0 10 - 0.4 11 12 13 - 0.2 14 15 16 L 0.0 2 0 1 4 5 6 9 10 11 12 13 14 15 16

Jaccard distance matrix between sequences of size 149 and k = 90  $\Box$ - 1.0 7  $^{\circ}$ 4 2 - 0.8 9 /  $\infty$ 0 - 0.6 10 12 13 - 0.4 14 15 16 - 0.2 18 19 20 L 0.0

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Jaccard distance matrix between sequences of size 150 and k = 90 - 0.40  $\Box$ 7 - 0.35  $^{\circ}$ 4 2 - 0.30 9 / - 0.25  $\infty$ 0 10 - 0.20 11 12 13 - 0.15 14 15 - 0.10 16 17 18 - 0.05 19 20 0.00 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Jaccard distance matrix between sequences of size 147 and k = 9- 2.00 0  $\Box$ 7 **-** 1.75  $^{\circ}$ 4 - 1.50 2 9 / - 1.25  $\infty$ 0 10 - 1.00 11 12 - 0.75 13 14 15 - 0.50 16 17 - 0.25 18 19 20 0.00 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Jaccard distance matrix between sequences of size 171 and k=9- 0.014 - 0.012 0 - 0.010 - 0.008 - 0.006 - 0.004  $\vdash$ - 0.002 0.000 0 1

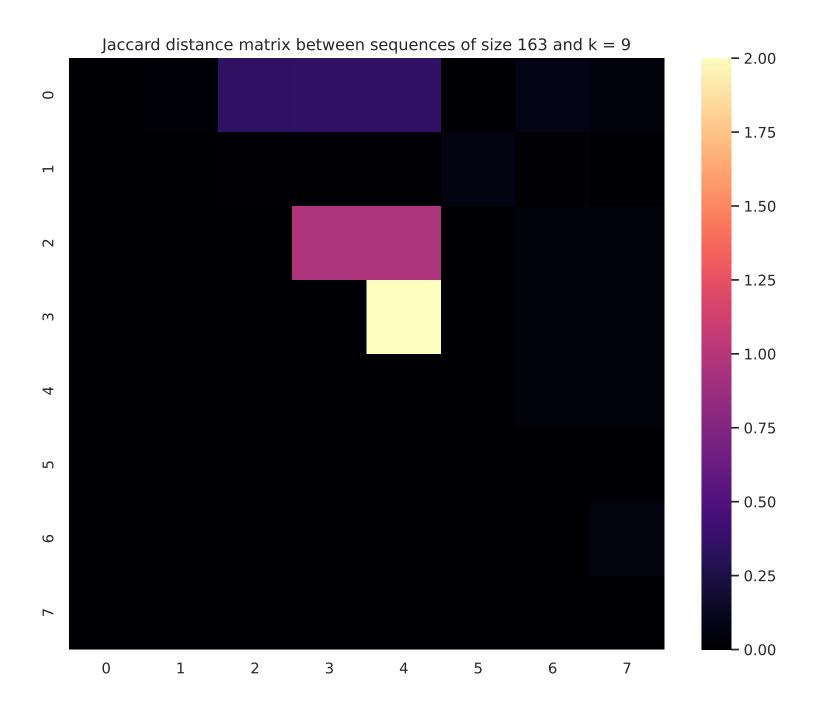
Jaccard distance matrix between sequences of size 167 and k=9- 0.012 - 0.010 0 - 0.008 - 0.006 - 0.004  $\vdash$ - 0.002 0.000 0 1

Jaccard distance matrix between sequences of size 165 and k = 90 - 0.14  $\vdash$ - 0.12 7 - 0.10  $\sim$ - 0.08 4 - 0.06 2 9 - 0.04 / - 0.02  $\infty$ 0.00 3 6 1 2 4 5 7 8 0

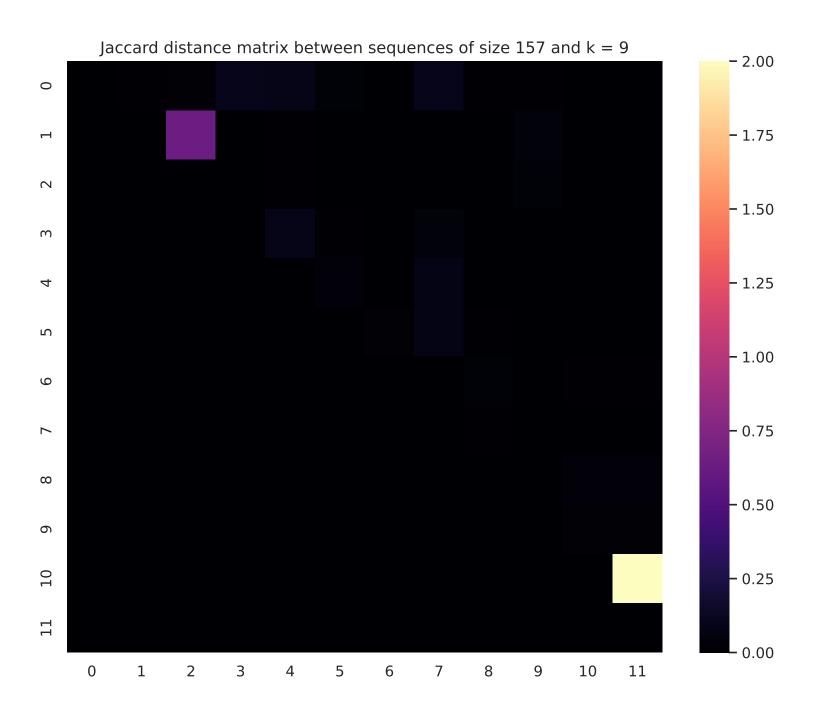
Jaccard distance matrix between sequences of size 151 and k = 90  $\Box$ 2 - 0.4  $\sim$ 4 2 9 - 0.3 /  $\infty$ 6 10 - 0.2 11 12 13 14 - 0.1 15 16 18 0.0

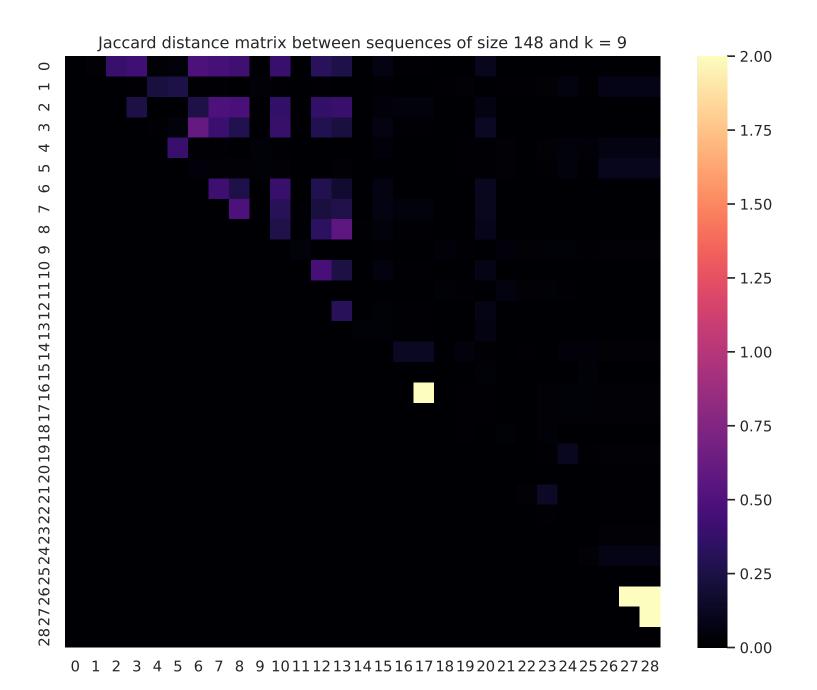
9 10 11 12 13 14 15 16 17 18

2 3 4



Jaccard distance matrix between sequences of size 145 and k = 9- 0.5  $\vdash$ - 0.4  $_{\odot}$ - 0.3 / - 0.2  $\infty$ - 0.1 0.0 

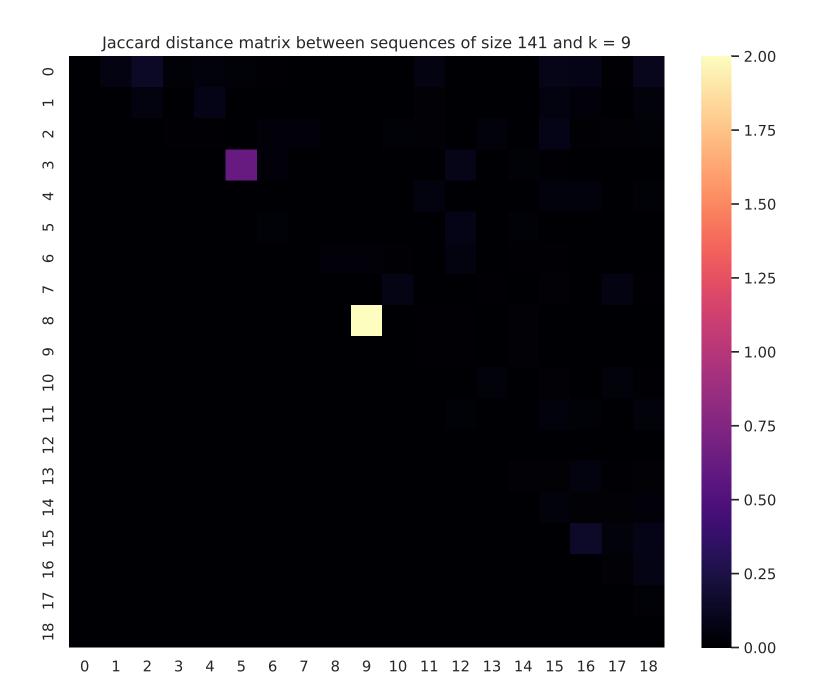




Jaccard distance matrix between sequences of size 146 and k = 9- 2.00 0  $\vdash$ 7 **-** 1.75  $^{\circ}$ 4 2 - 1.50 9 /  $\infty$ - 1.25 6 10 12 - 1.00 13 14 15 - 0.75 16 18 - 0.50 19 20 21 - 0.25 22 23 24 0.00

 $0 \quad 1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \ 11 \ 12 \ 13 \ 14 \ 15 \ 16 \ 17 \ 18 \ 19 \ 20 \ 21 \ 22 \ 23 \ 24$ 

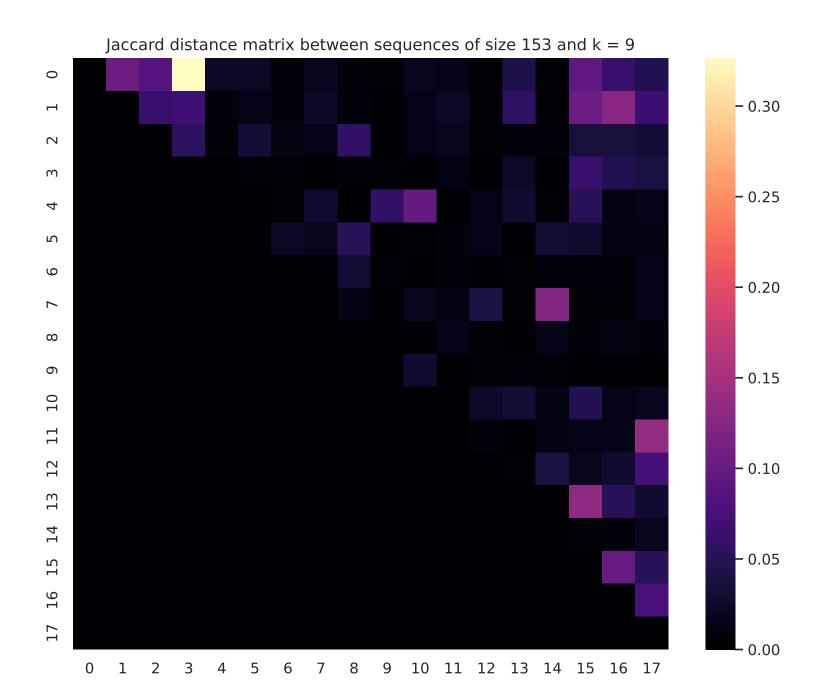
Jaccard distance matrix between sequences of size 143 and k = 9 $\vdash$  $\sim$ - 0.4 / - 0.3  $\infty$ - 0.2 - 0.1 L 0.0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



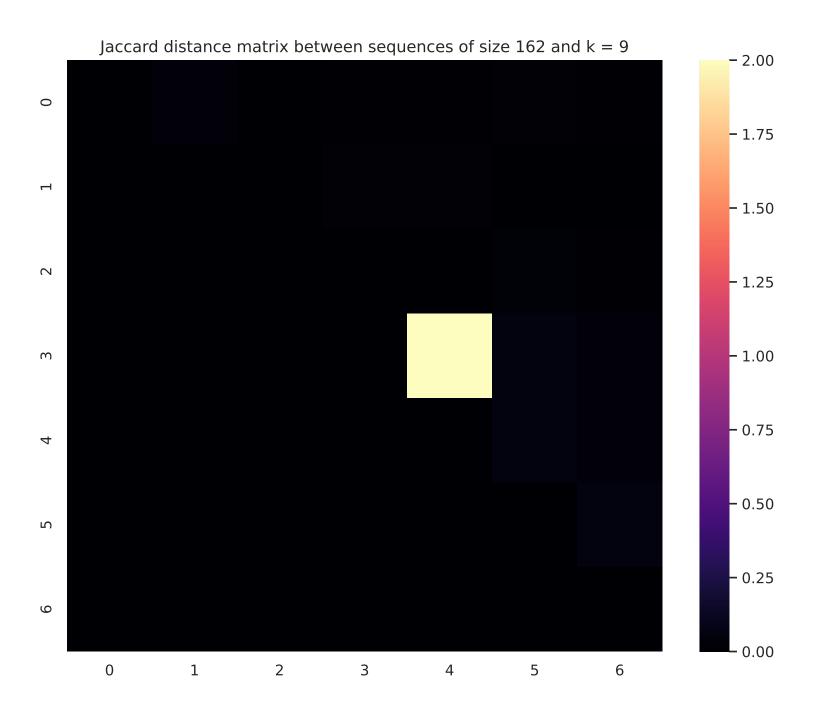
Jaccard distance matrix between sequences of size 136 and k=90 - 0.30  $\Box$ 7 - 0.25  $\sim$ 4 2 - 0.20 9 / - 0.15  $\infty$ 0 - 0.10 10 11 12 - 0.05 13 14 0.00 2 3 5 6 7 10 11 0 1 8 12 13 14

Jaccard distance matrix between sequences of size 168 and k=9**-** 0.35 - 0.30 0 - 0.25 - 0.20 - 0.15 - 0.10  $\vdash$ - 0.05 0.00 0 1

Jaccard distance matrix between sequences of size 134 and k = 90  $\vdash$ - 0.8 7 - 0.7  $\sim$ 4 - 0.6 2 9 - 0.5 /  $\infty$ - 0.4 0 10 - 0.3 - 0.2 12 13 - 0.1 14 15 0.0 2 5 6 0 1 3 4 10 11 12 13 14 15

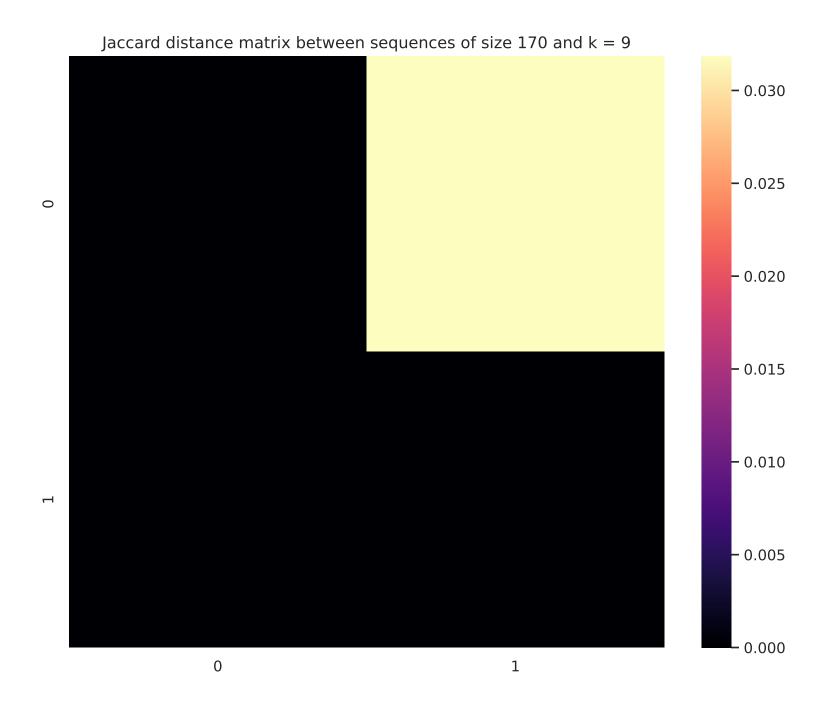


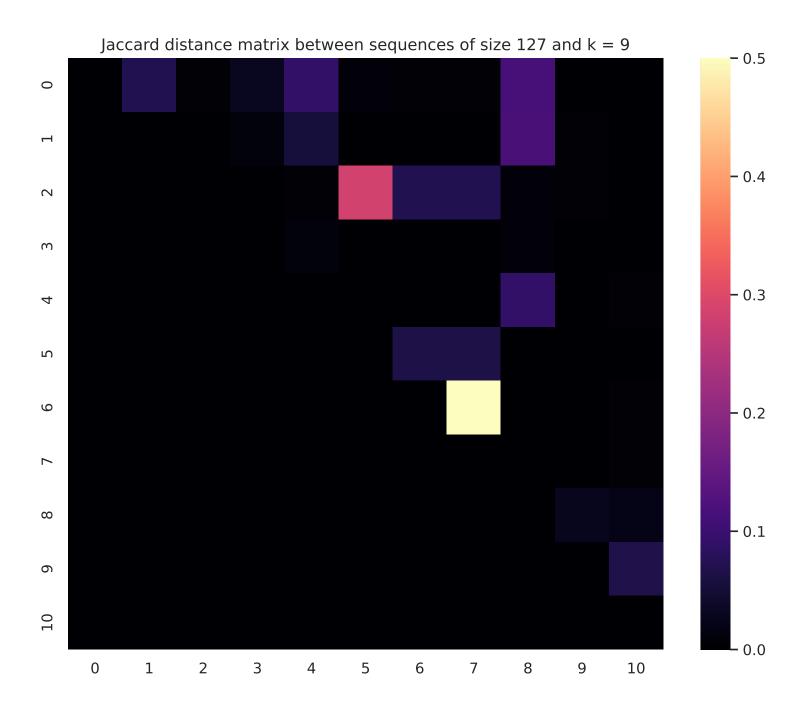
Jaccard distance matrix between sequences of size 139 and k = 9- 2.00 0  $\Box$ 7 **-** 1.75  $\sim$ 4 2 - 1.50 9  $\infty$ - 1.25 0 10 - 1.00 12 14 - 0.75 15 16 17 - 0.50 18 19 20 - 0.25 21 22 23 0.00 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23



Jaccard distance matrix between sequences of size 137 and k = 9- 2.00 0  $\vdash$ 7 **-** 1.75  $^{\circ}$ 4 2 - 1.50 9 /  $\infty$ - 1.25 6 10 12 - 1.00 13 14 15 - 0.75 16 18 - 0.50 19 20 21 - 0.25 22 23 24 0.00

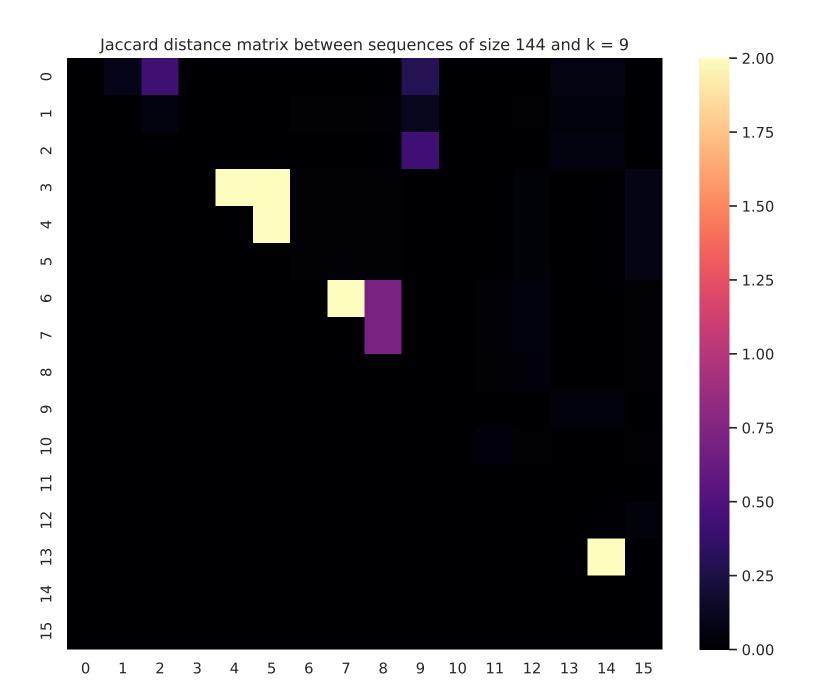
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

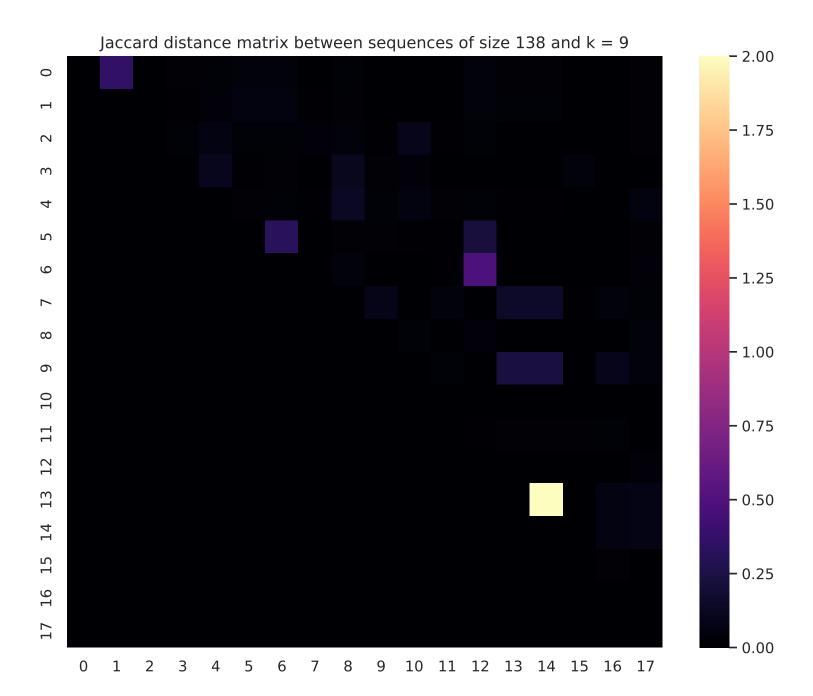


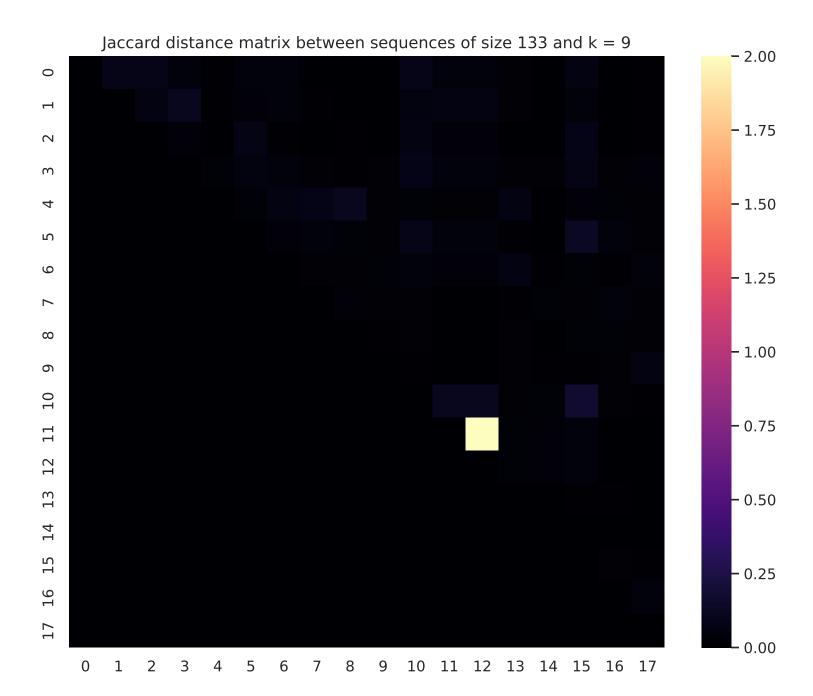


Jaccard distance matrix between sequences of size 135 and k = 9- 2.00 0  $\vdash$ 7 **-** 1.75  $\sim$ 4 - 1.50 2 9 / - 1.25  $\infty$ 6 10 - 1.00 11 12 - 0.75 14 15 16 - 0.50 17 18 - 0.25 19 20 0.00 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

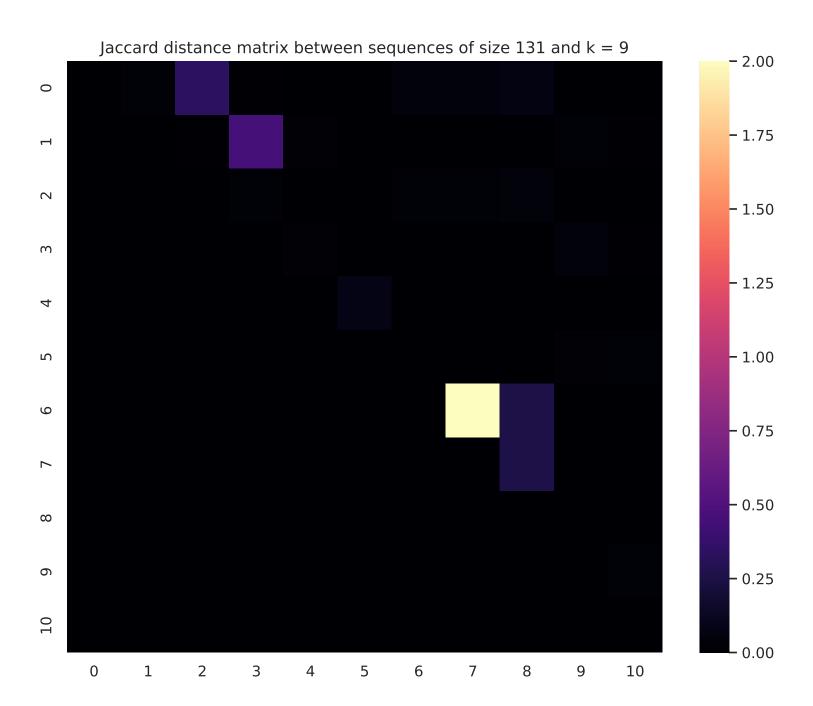
Jaccard distance matrix between sequences of size 142 and k = 90  $\vdash$ **-** 0.35 7  $\sim$ - 0.30 4 2 - 0.25 9 / - 0.20  $\infty$ 0 - 0.15 10 - 0.10 12 13 - 0.05 14 15 0.00 4 5 6 0 1 2 3 10 11 12 13 14 15

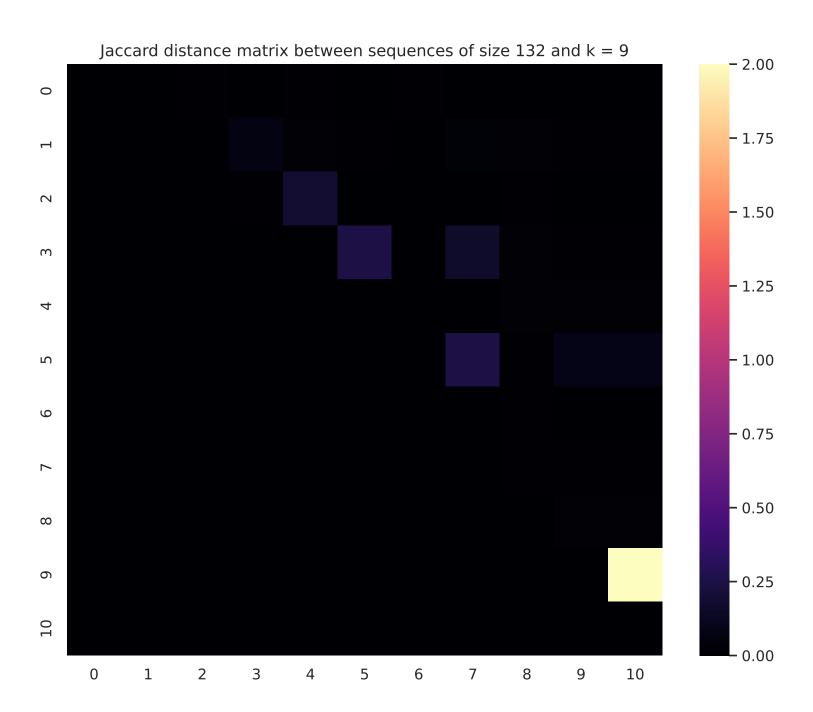




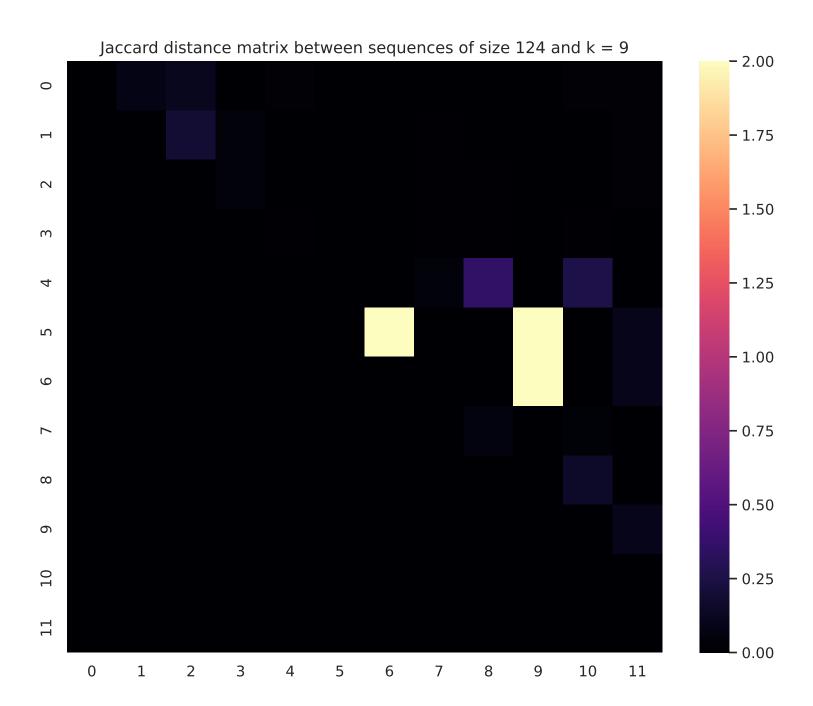


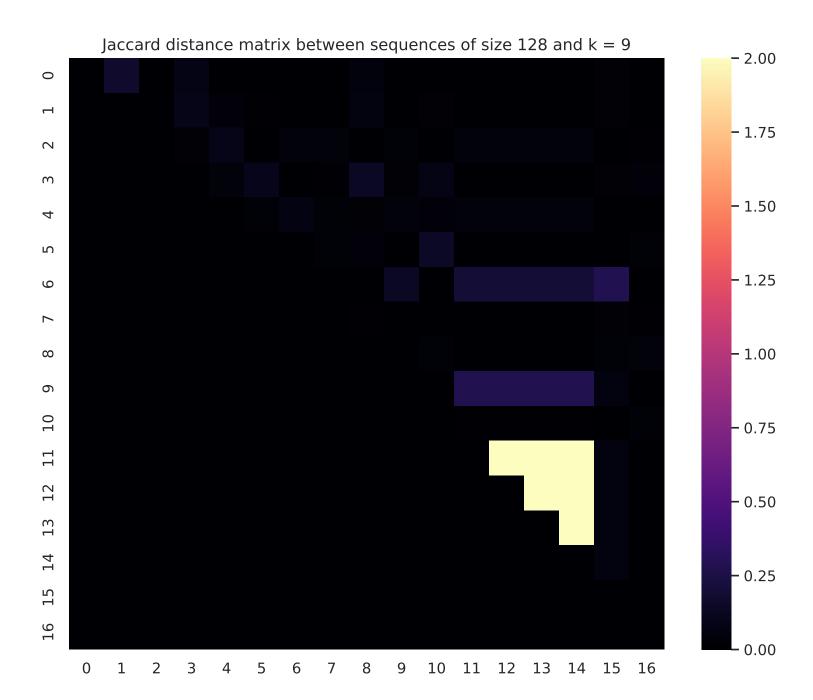
Jaccard distance matrix between sequences of size 129 and k = 90 - 0.20 - 0.15 7 - 0.10  $\sim$ 4 - 0.05 2 0.00 3 0 1 5





Jaccard distance matrix between sequences of size 166 and k=9- 0.06 - 0.05 0 - 0.04 - 0.03 - 0.02  $\vdash$ - 0.01 0.00 0 1





Jaccard distance matrix between sequences of size 130 and k = 9- 1.0  $\vdash$ - 0.8  $\sim$ - 0.6 / - 0.4  $\infty$ - 0.2 0.0 

Jaccard distance matrix between sequences of size 117 and k=9- 0.06 0 - 0.05 - 0.04 - 0.03 - 0.02 2 - 0.01 0.00 0 1 2

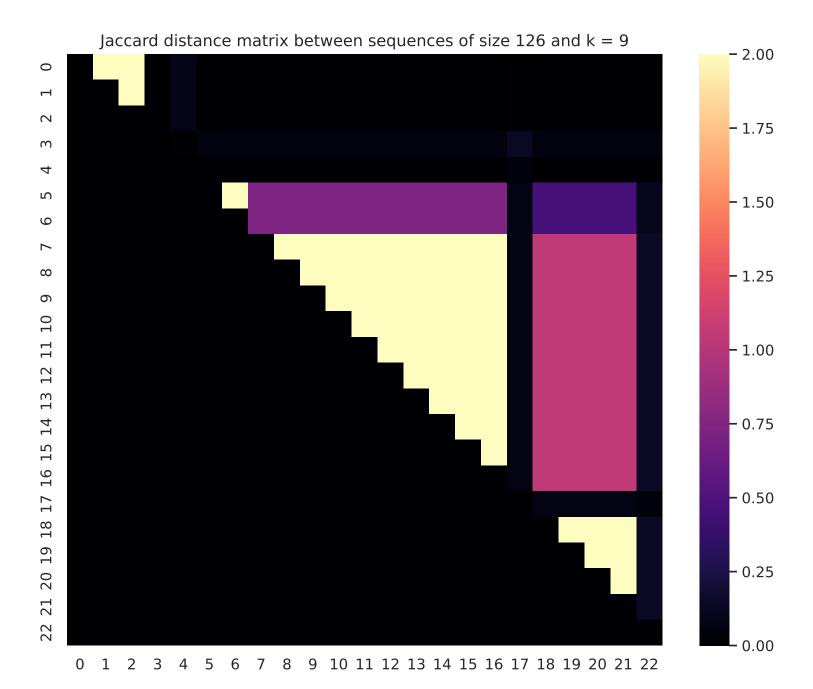
Jaccard distance matrix between sequences of size 121 and k = 90 - 0.10 - 0.08  $\vdash$ - 0.06 2 - 0.04  $\sim$ - 0.02 0.00 3

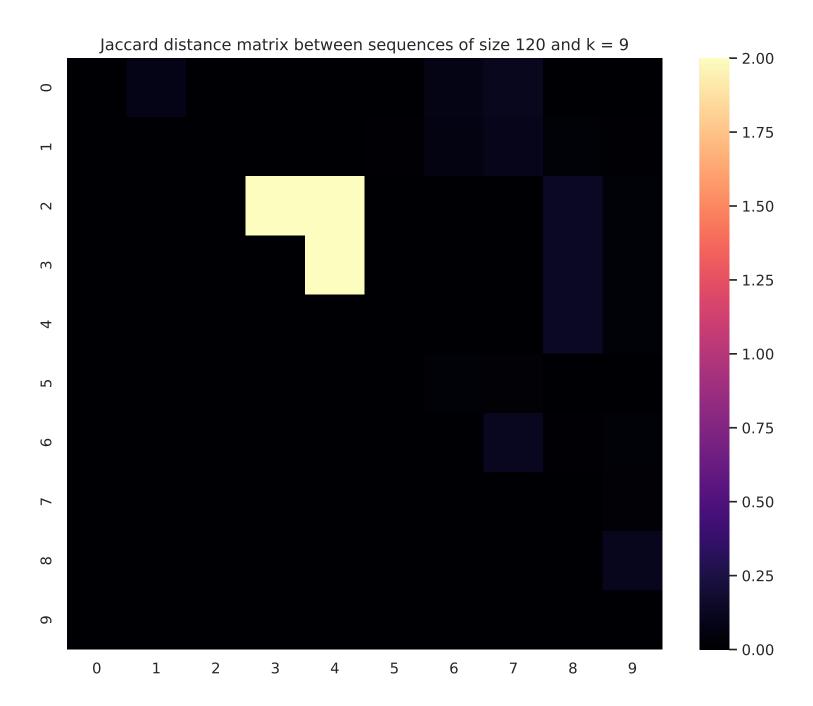
2

4

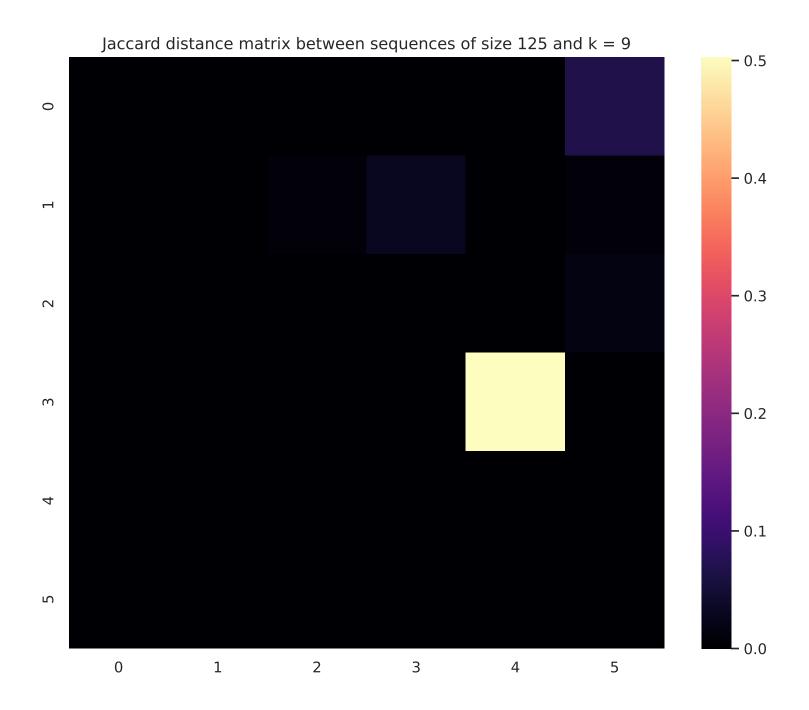
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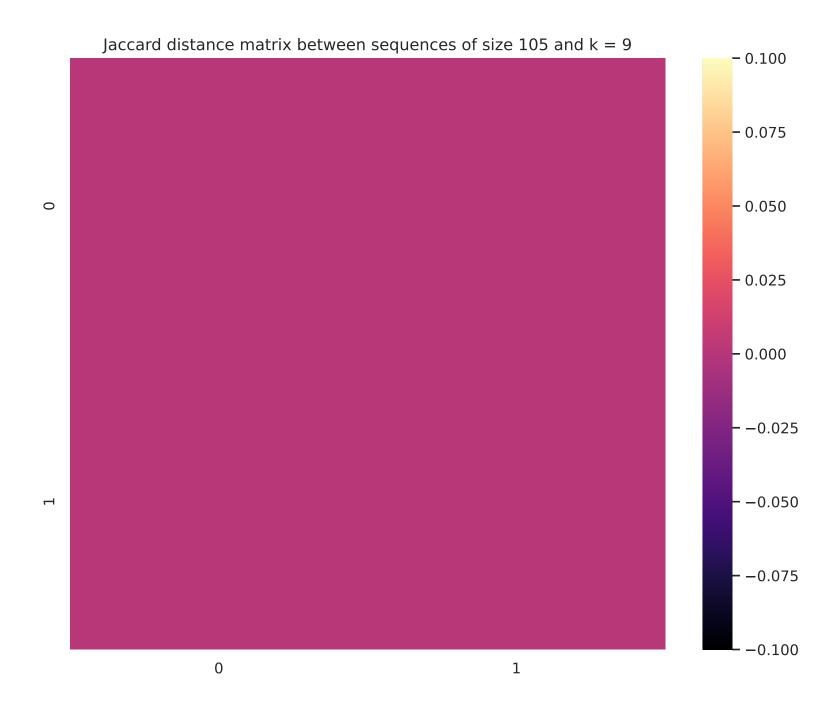
1

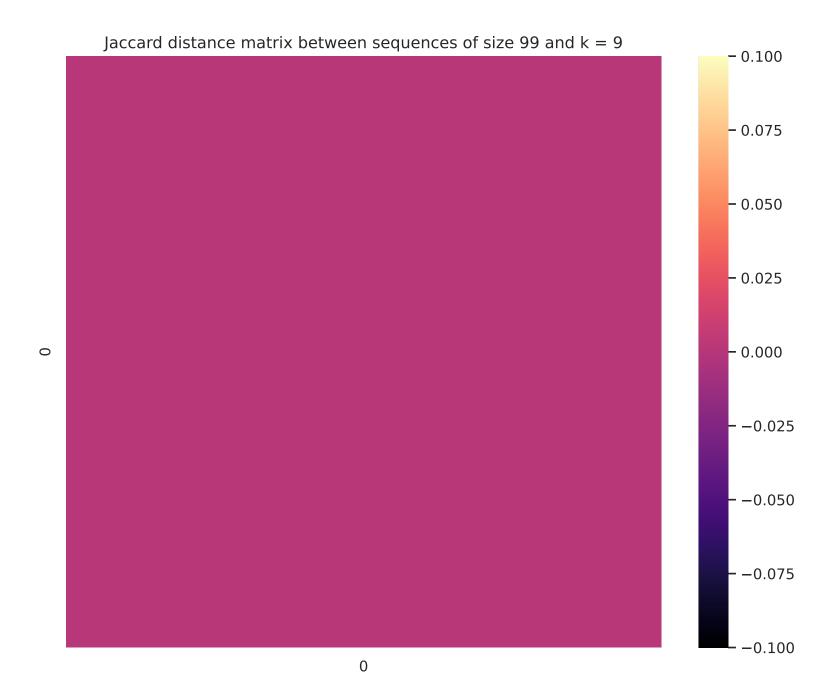


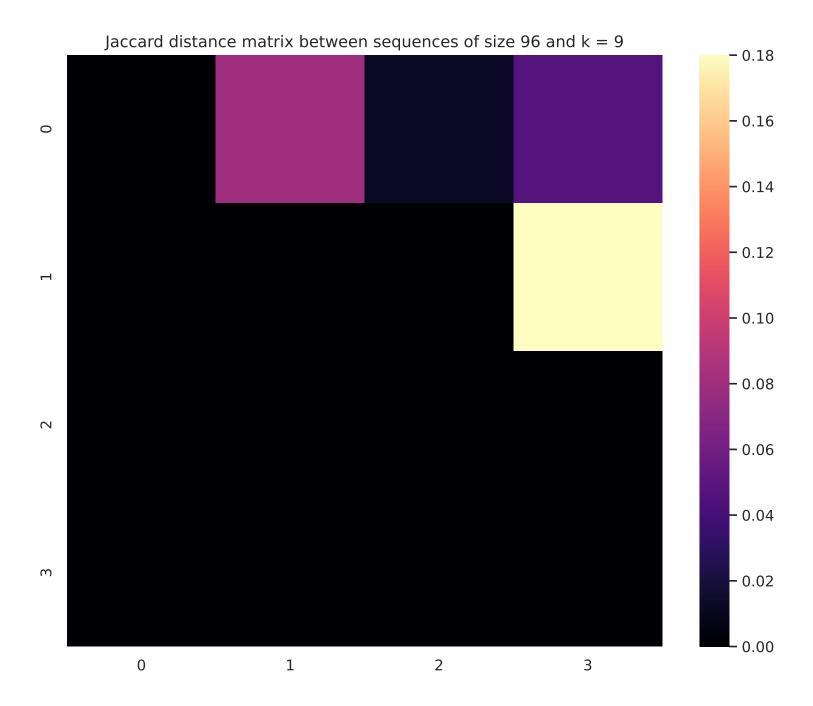


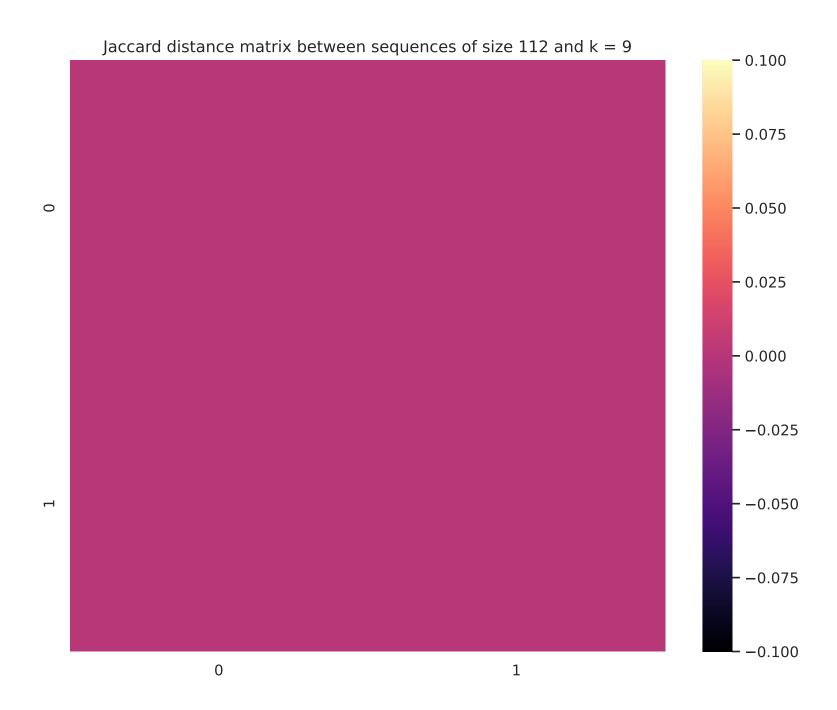
Jaccard distance matrix between sequences of size 107 and k=9- 0.010 - 0.008 0 - 0.006 - 0.004  $\vdash$ - 0.002 0.000 0 1

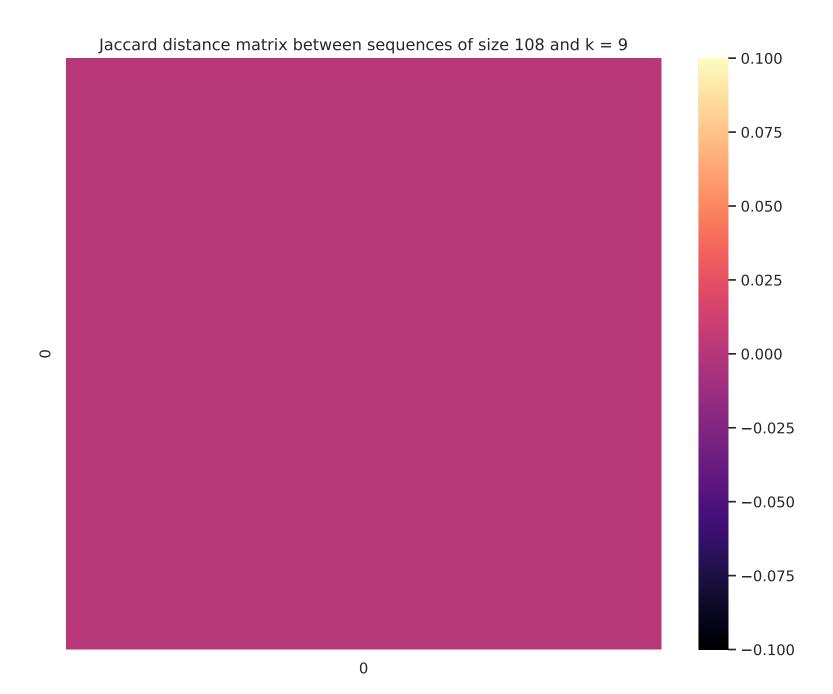


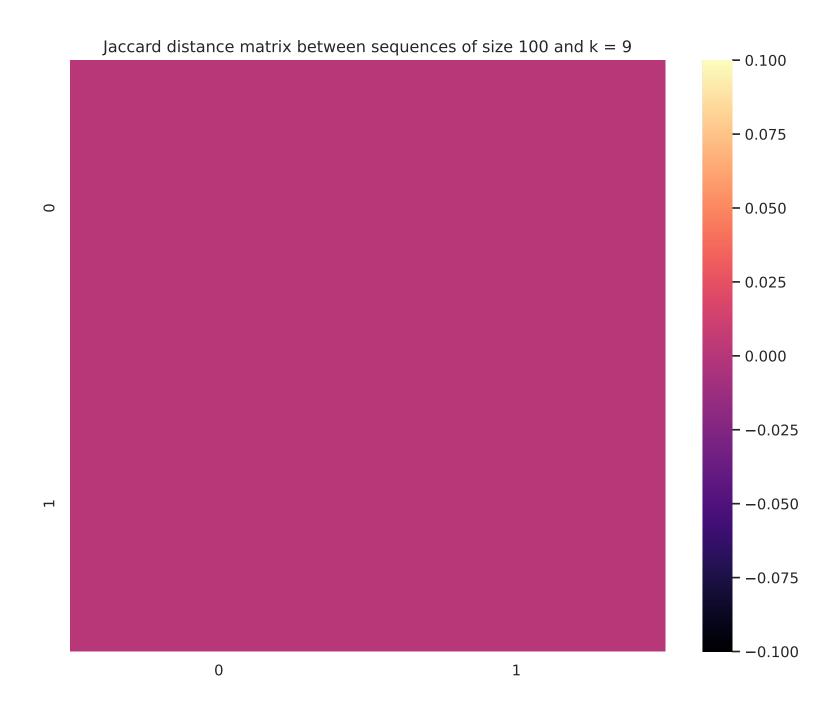




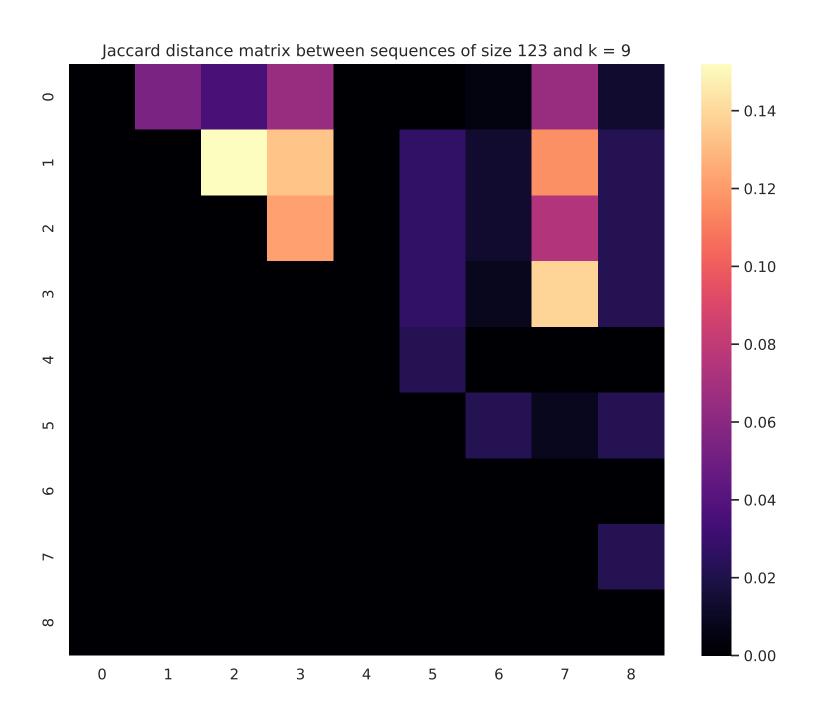








Jaccard distance matrix between sequences of size 122 and k=9- 0.16 0 - 0.14  $\vdash$ - 0.12 - 0.10 2 - 0.08 - 0.06  $\sim$ - 0.04 - 0.02 0.00 3 0 1 2 4

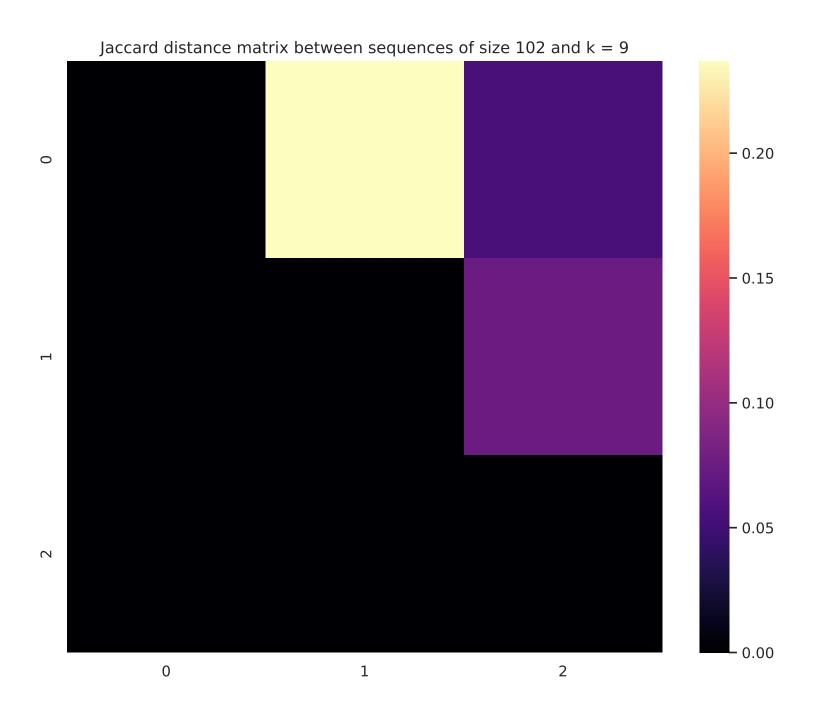


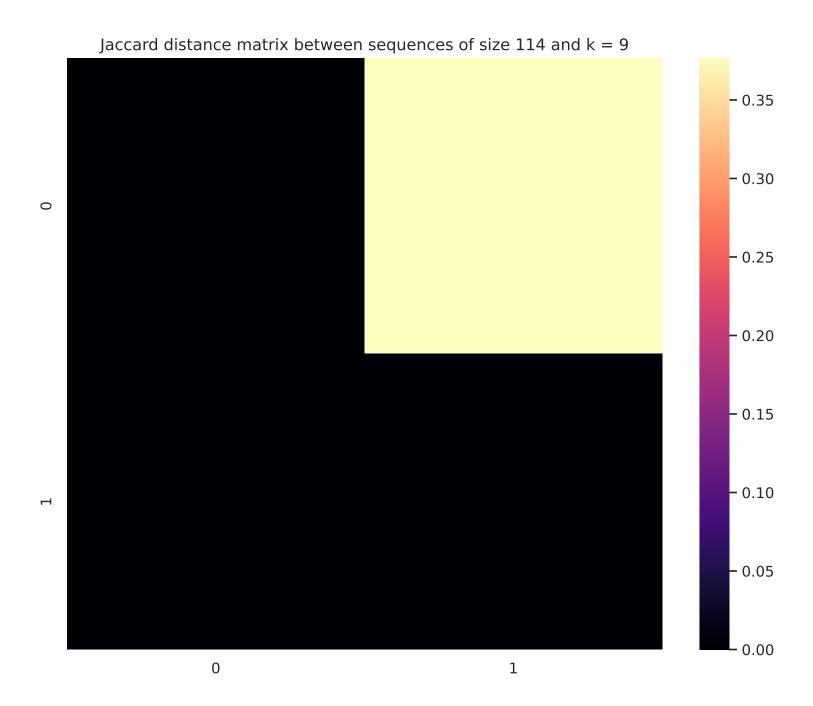
Jaccard distance matrix between sequences of size 119 and k = 90 - 0.16 - 0.14  $\vdash$ - 0.12 2 - 0.10  $\sim$ - 0.08 4 - 0.06 - 0.04 2 - 0.02 9 0.00 2 1 3 5

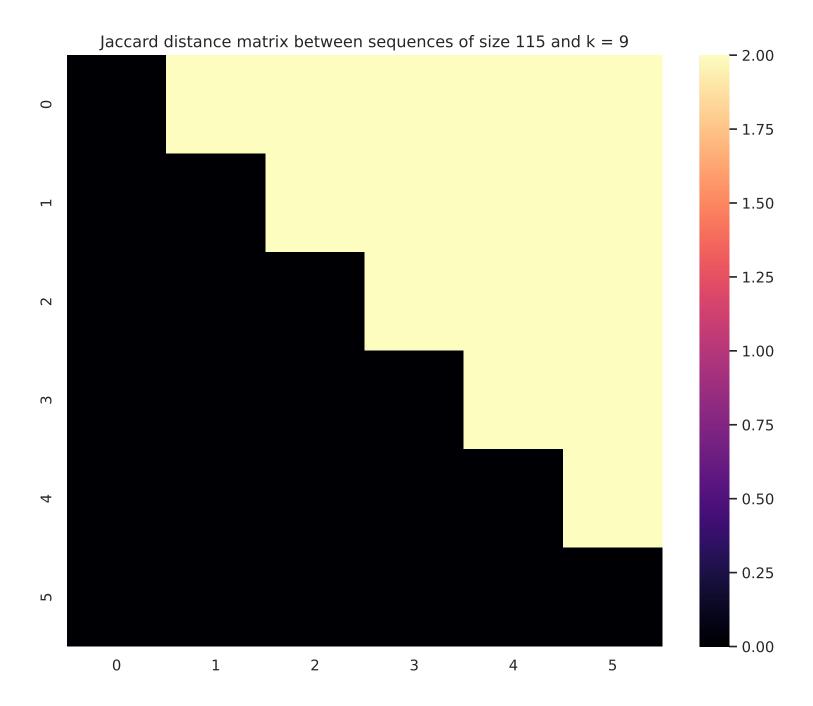
4

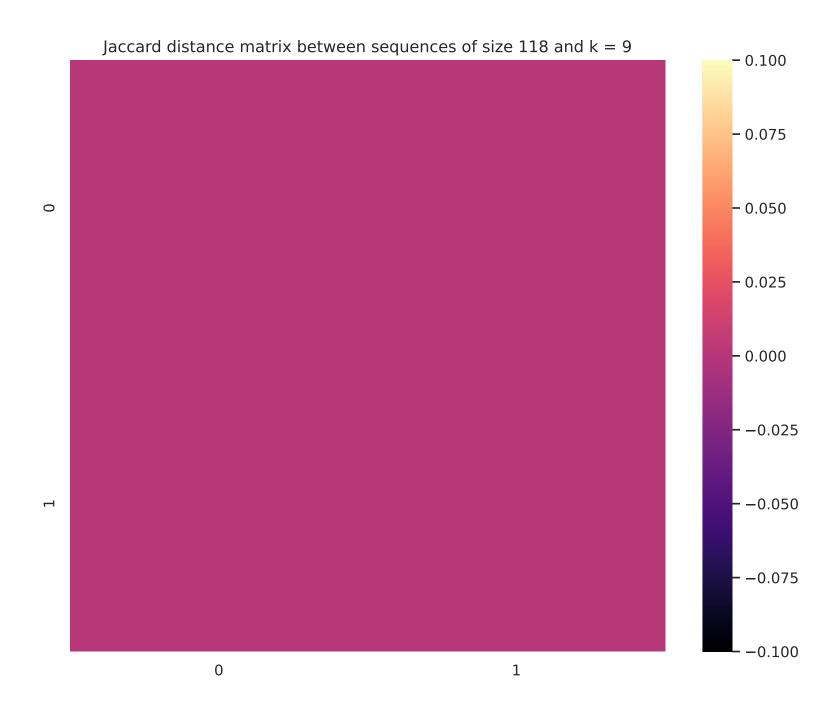
6

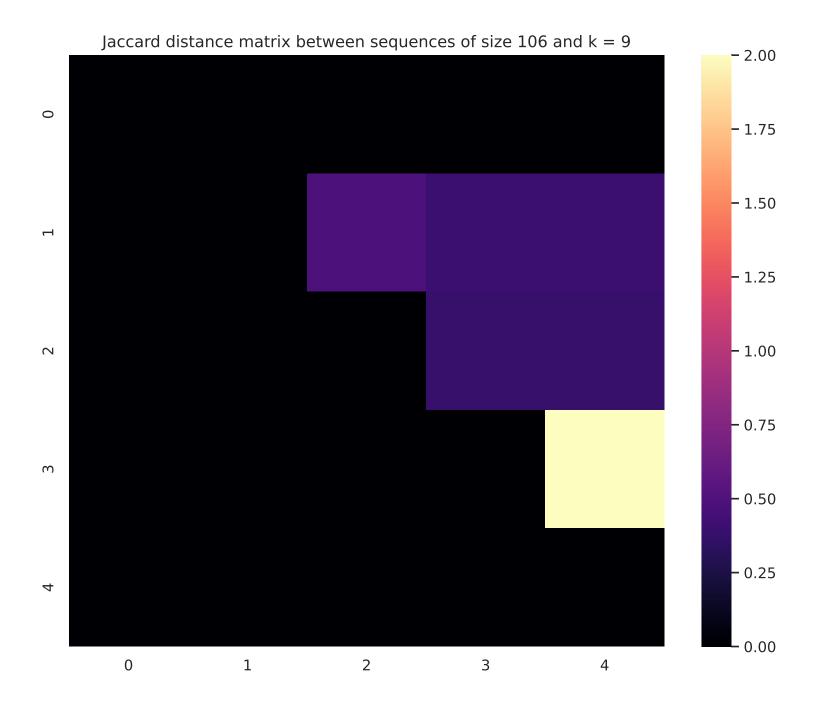
0

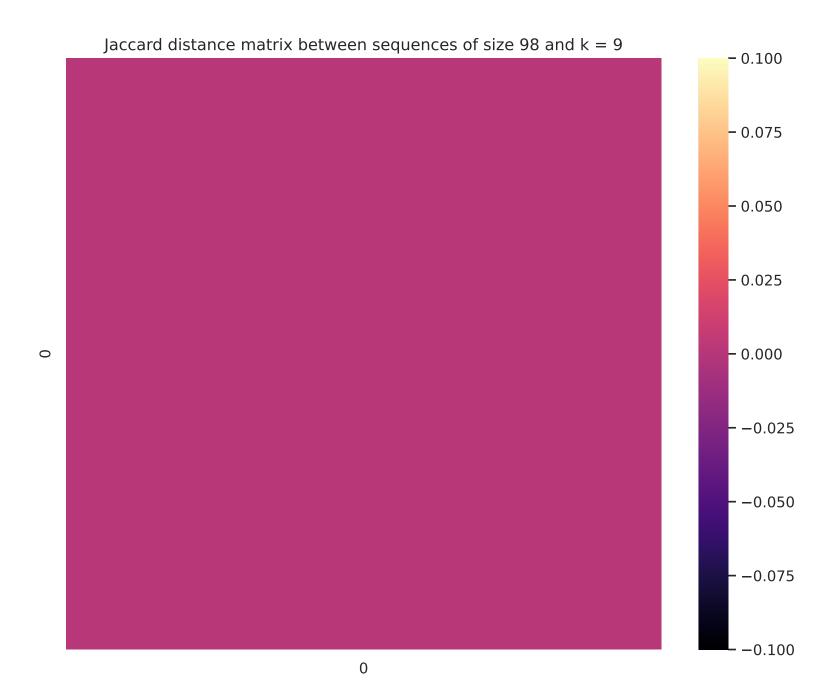


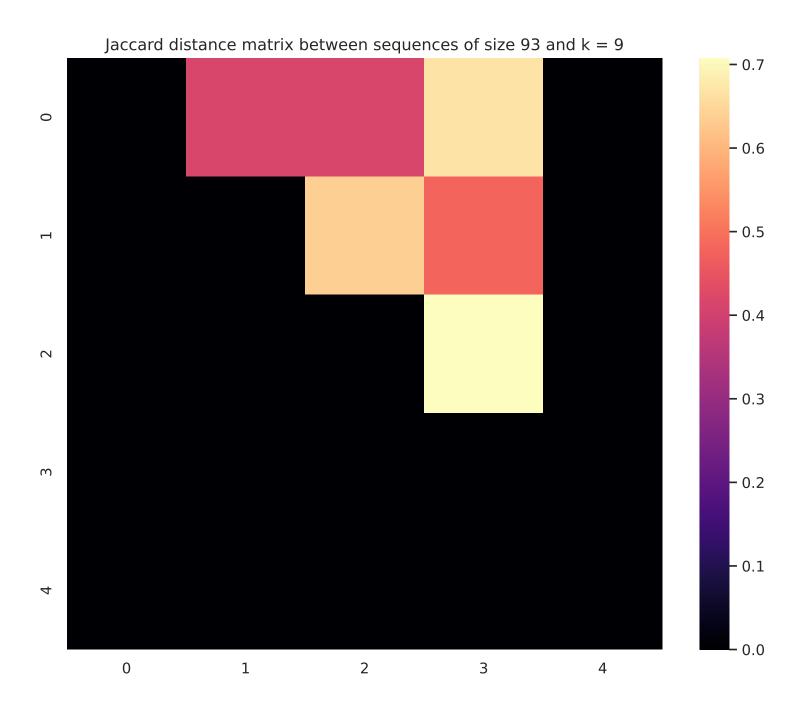


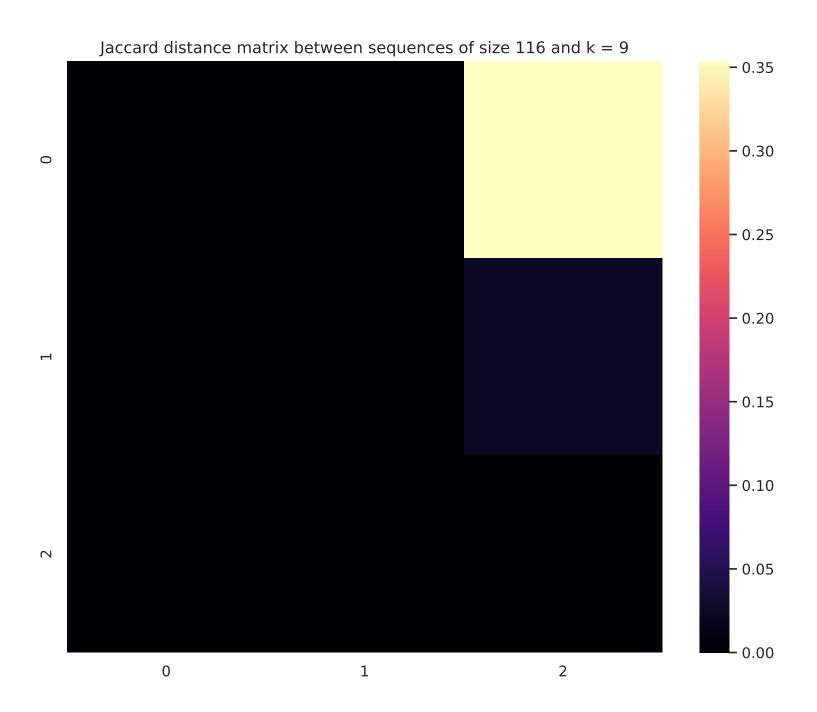


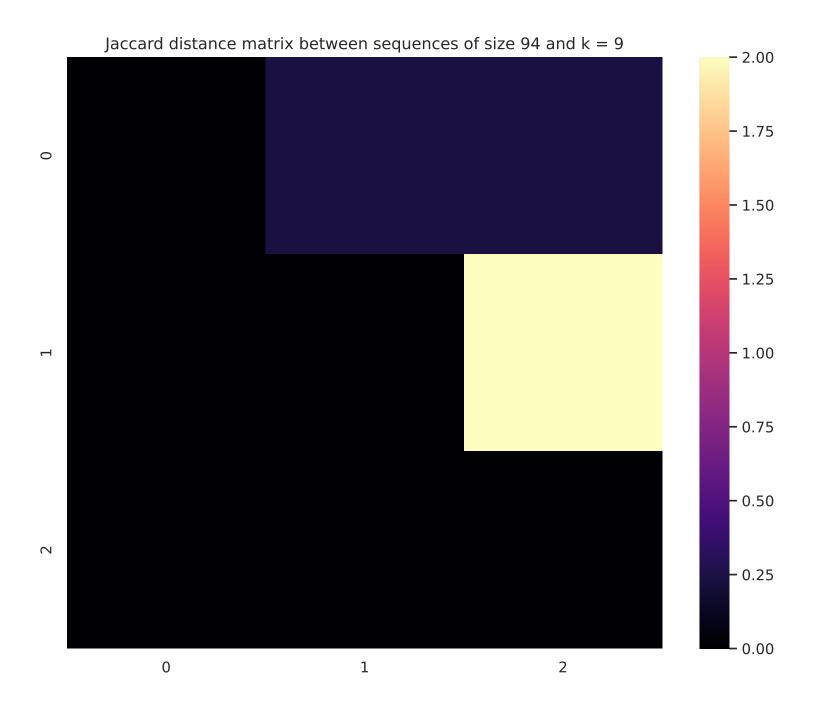


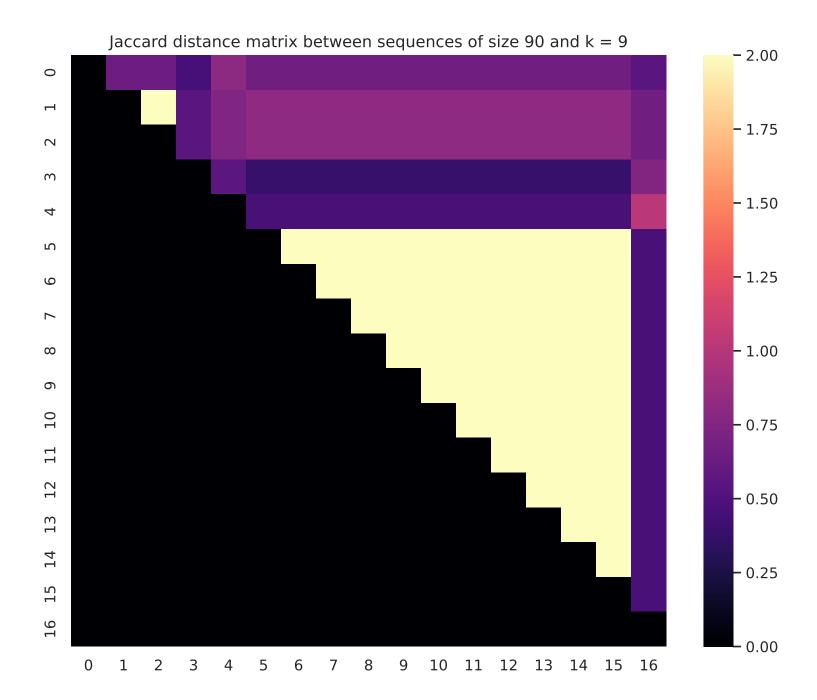












Jaccard distance matrix between sequences of size 87 and k=9**-** 0.35 0 - 0.30 - 0.25 - 0.20 - 0.15 - 0.10 2 - 0.05 0.00 0 1 2

Jaccard distance matrix between sequences of size 95 and k=90 - 0.4 - 0.3 - 0.2 - 0.1 7 0 1 2

