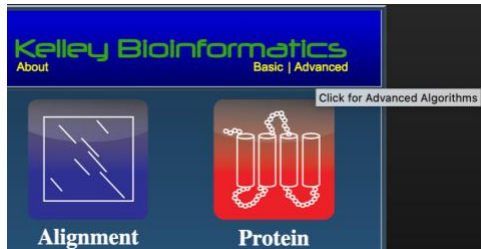


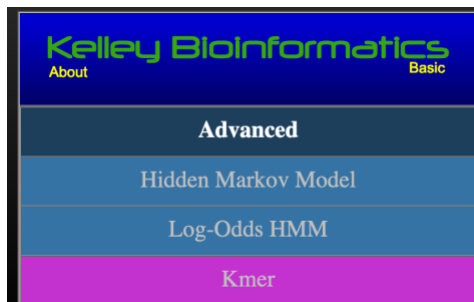
## K-mer Genome Matching Exercise

To complete the Kmer (k-mer) exercise, you need to go to [kelleybioinfo.org](http://kelleybioinfo.org) and complete the QUIZ MODULE. Once completed take a screenshot of your answer and post to Canvas.

- 1) Select the Advanced link:



- 2) Select Kmer:



- 3) Scroll to the bottom and select "QUIZ MODE":

The screenshot shows the Kmer exercise interface. At the top, it lists 'Genome 3' with several k-mers: TCTA, CTCT, TAGA, ACAC, ACCT, TTCA, GAAC, AACA, ATCT, TATC, CTCC, GATT, AGAT, GGAA. Below this is a table of 'SHARED K-MERS' for three genomes. At the bottom, there are 'RESET' and 'QUIZ MODE' buttons. A blue arrow points to the 'QUIZ MODE' button.

SHARED K-MERS	SR1	SR2
Genome 1	2	3
Genome 2	2	2
Genome 3	2	4

- 4) Click on the matching k-mers. Fill in the boxes below with the correct answer. Take a screen shot and email your final filled form to the course assignment email address.

The screenshot shows the Kmer exercise interface with a sequence alignment and a list of k-mers for three genomes. Below the alignment, there is a section titled 'Click the shared k-mers:' with a list of k-mers for each genome. At the bottom, there is a table of 'SHARED K-MERS' for three genomes. The 'SR1' column has a green checkmark in the first row. Below the table, there are fields for 'Best Match of SR1 is Genome:' and 'Best Match of SR2 is Genome:'.

Click the shared k-mers:

Genome 1:  
AATA, TATC, TCTA, ATCT, CACA, AGAC, GGAA, ACAC, ATAC, CAAA, TCTA, GACG, CTAT, CACC

Genome 2:  
TCTA, CACC, ACAC, GAAC, AACA, ATCT, CTAT, AGAC, CCTC, TATC, GGAA, GAGA, ACCT, CTCT

Genome 3:  
ACCT, AGAC, CACC, GAAC, TACA, CTAT, CCTC, ATCT, ACGA, TATC, GACG, ACAC, TCTA, GGAG

SHARED K-MERS	SR1	SR2
Genome 1:	4 ✓	
Genome 2:		
Genome 3:		

Best Match of SR1 is Genome:

Best Match of SR2 is Genome: