

Q1:

$$u_0 = \begin{bmatrix} 99.22 \\ 428.64 \end{bmatrix} \quad \Sigma_0 = \begin{bmatrix} 264.35 & -212.54 \\ -212.54 & 1386.23 \end{bmatrix}$$

Q2:

$$u_1 = \begin{bmatrix} 136.93 \\ 366.64 \end{bmatrix} \quad \Sigma_1 = \begin{bmatrix} 338.24 & 162.82 \\ 162.82 & 712.85 \end{bmatrix}$$

Q3:

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	Freshwater	Marine	Predicted_Label
0	144	403	Candian
1	76	442	Alaskan
2	100	470	Alaskan
3	155	349	Candian
4	99	403	Alaskan
5	124	341	Candian
6	136	438	Alaskan
7	152	301	Candian
8	99	481	Alaskan
9	80	398	Alaskan