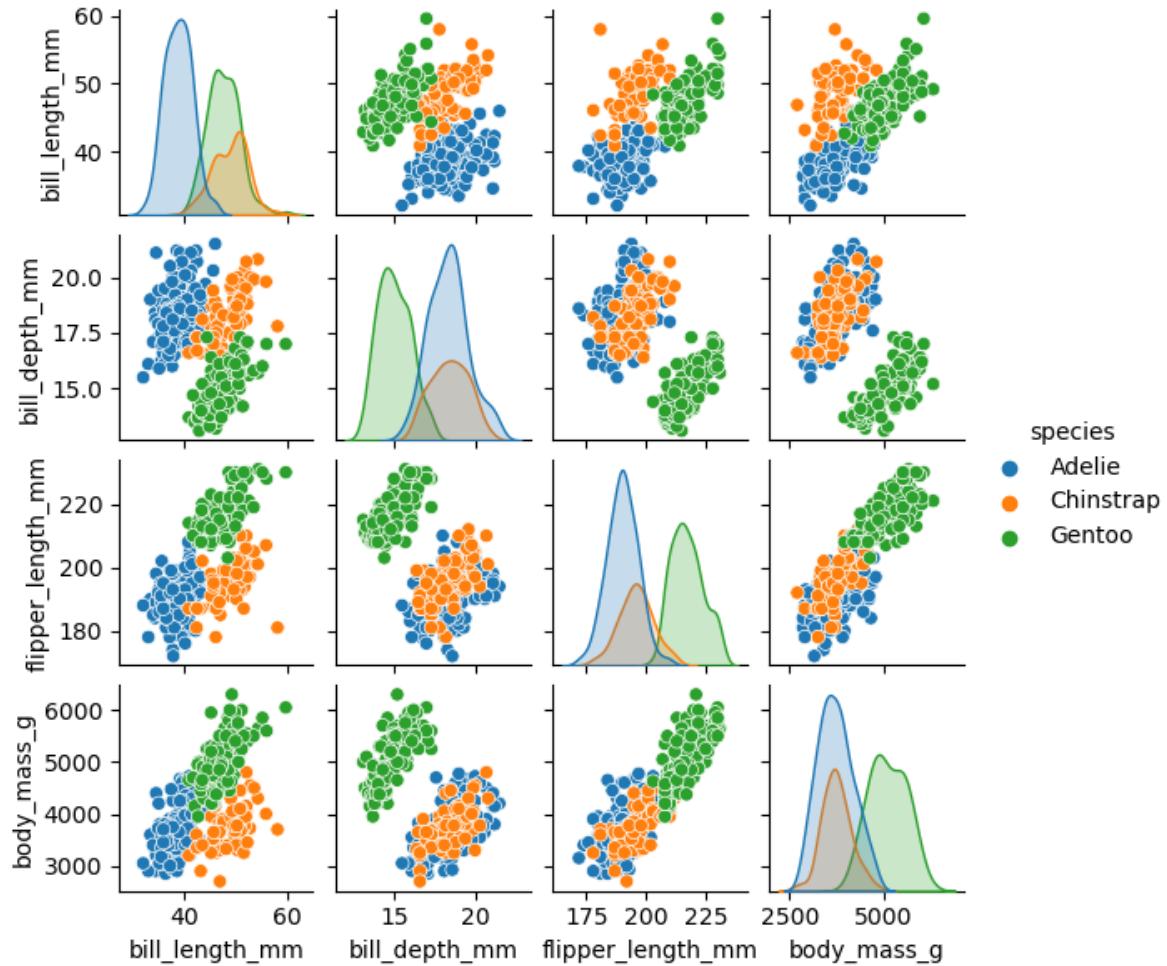


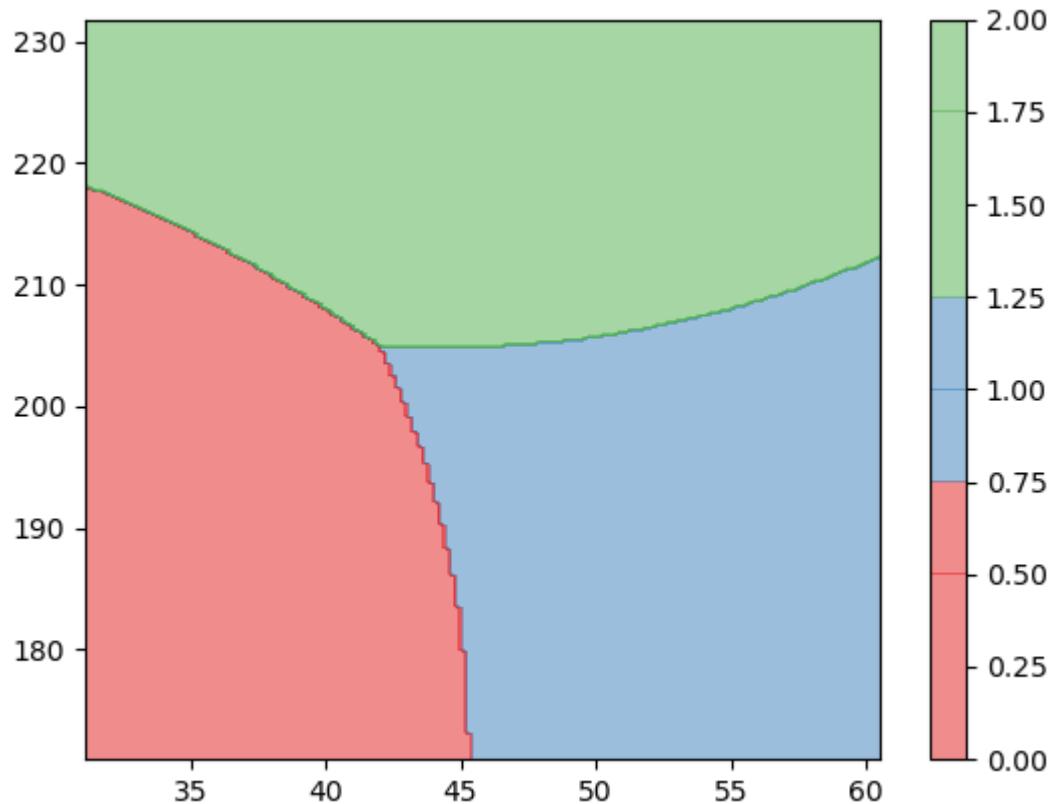
## EX4

Task 1.1

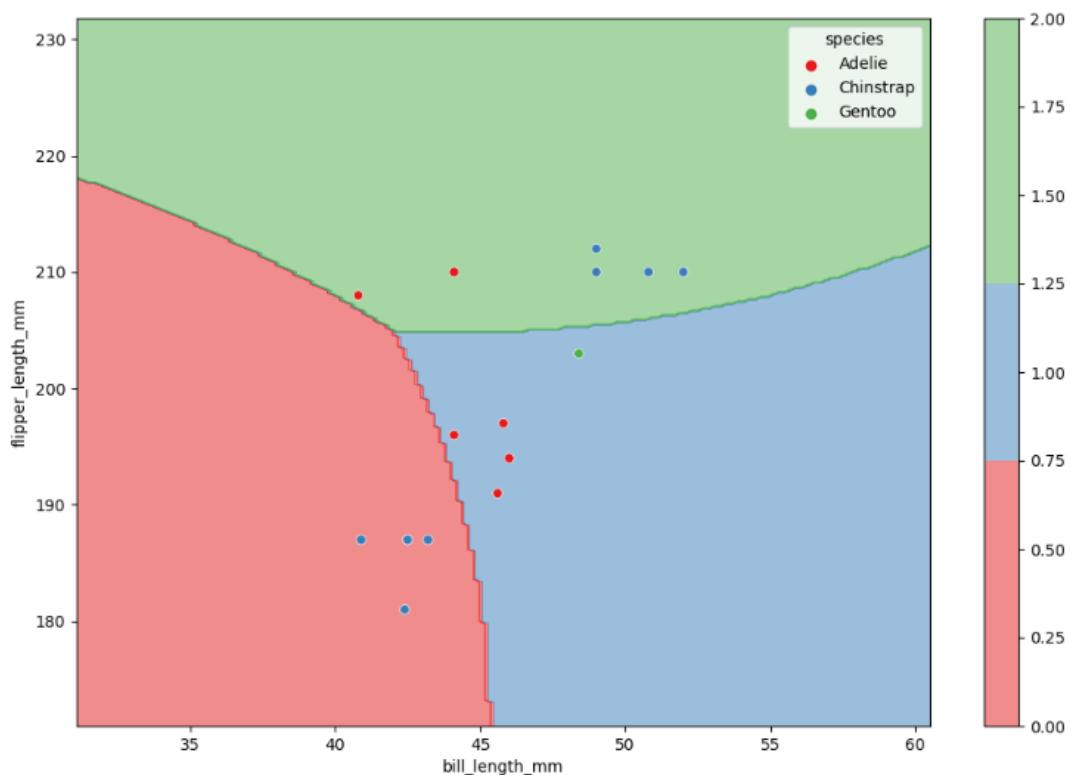


The two features which allow for the most accurate 2-feature GNB classifier were the **bill\_length\_mm** and **flipper\_length\_mm**. The bill\_length\_mm and flipper\_length\_mm has graphs that were accurate enough (0.95).

Task 1.3



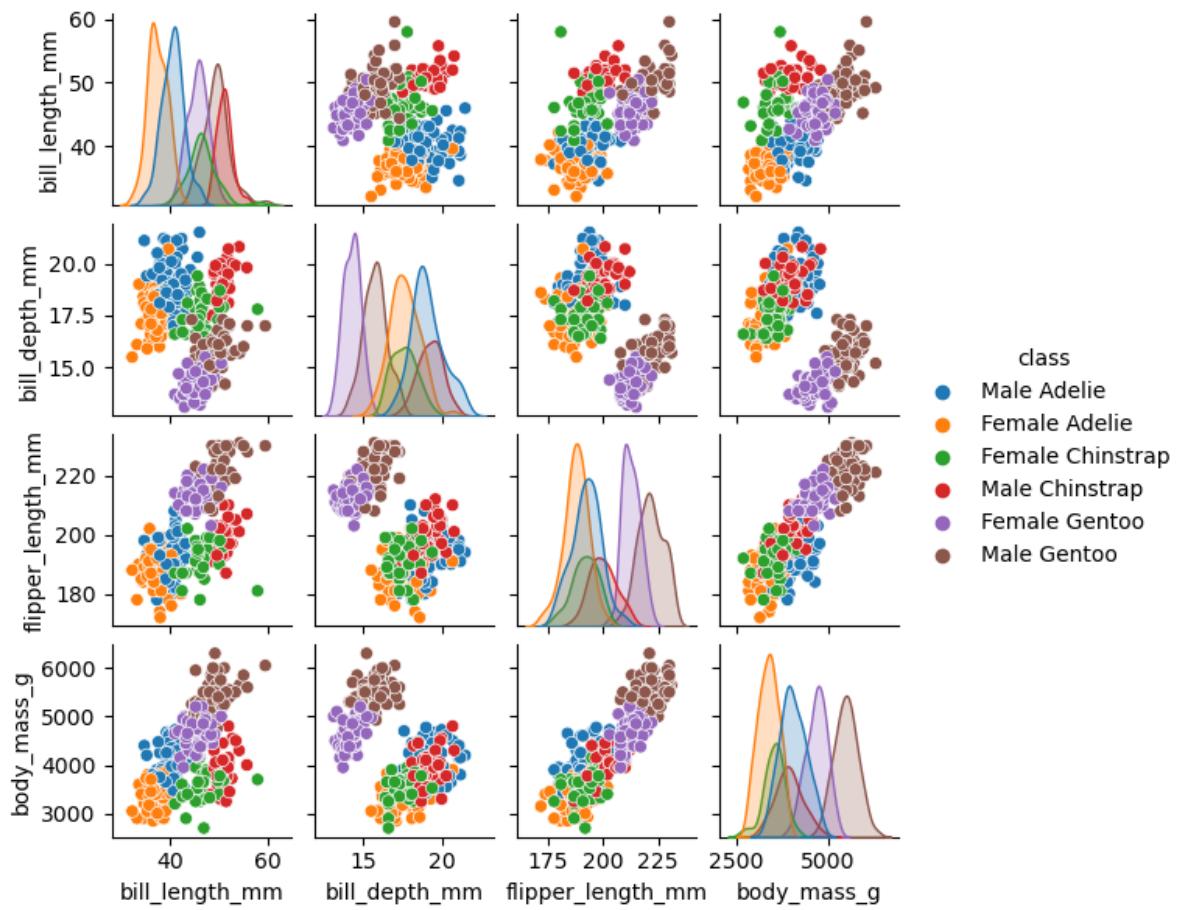
Task 1.4



Task 1.5

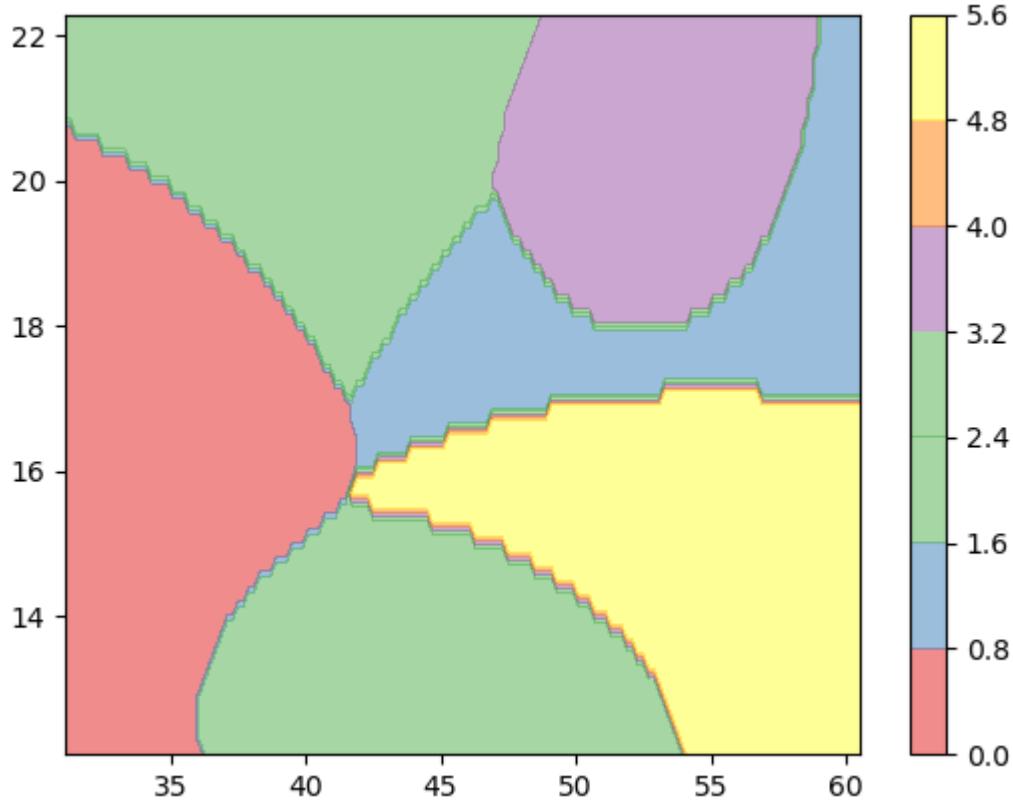
	precision	recall	f1-score	support
Adelie	1.00	0.93	0.96	28
Chinstrap	0.94	0.94	0.94	17
Gentoo	0.92	1.00	0.96	22
accuracy			0.96	67
macro avg	0.95	0.96	0.95	67
weighted avg	0.96	0.96	0.96	67

### Task 2.1

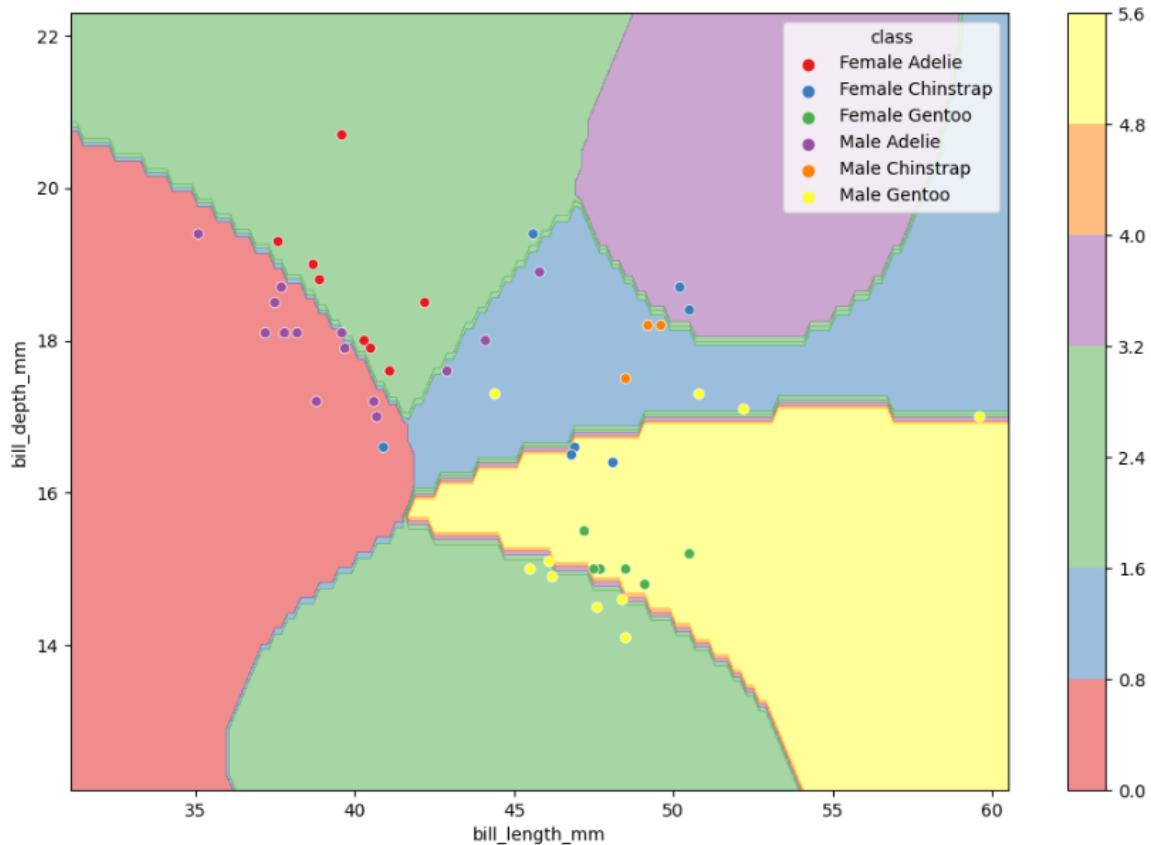


The two features which allow for the most accurate 2-feature GNB classifier were the **bill\_length\_mm** and **bill\_depth\_mm**. The bill\_length\_mm and bill\_depth\_mm has graphs that were accurate enough (0.85). The bill\_length\_mm and bill\_depth\_mm graphs were separated, and the species don't overlap each other.

### Task 2.3



### Task 2.4



Task 2.5

	precision	recall	f1-score	support
Female Adelie	0.90	0.90	0.90	10
Female Chinstrap	0.50	0.71	0.59	7
Female Gentoo	1.00	0.93	0.96	14
Male Adelie	0.94	0.94	0.94	18
Male Chinstrap	0.88	0.70	0.78	10
Male Gentoo	0.75	0.75	0.75	8
accuracy			0.85	67
macro avg	0.83	0.82	0.82	67
weighted avg	0.87	0.85	0.86	67