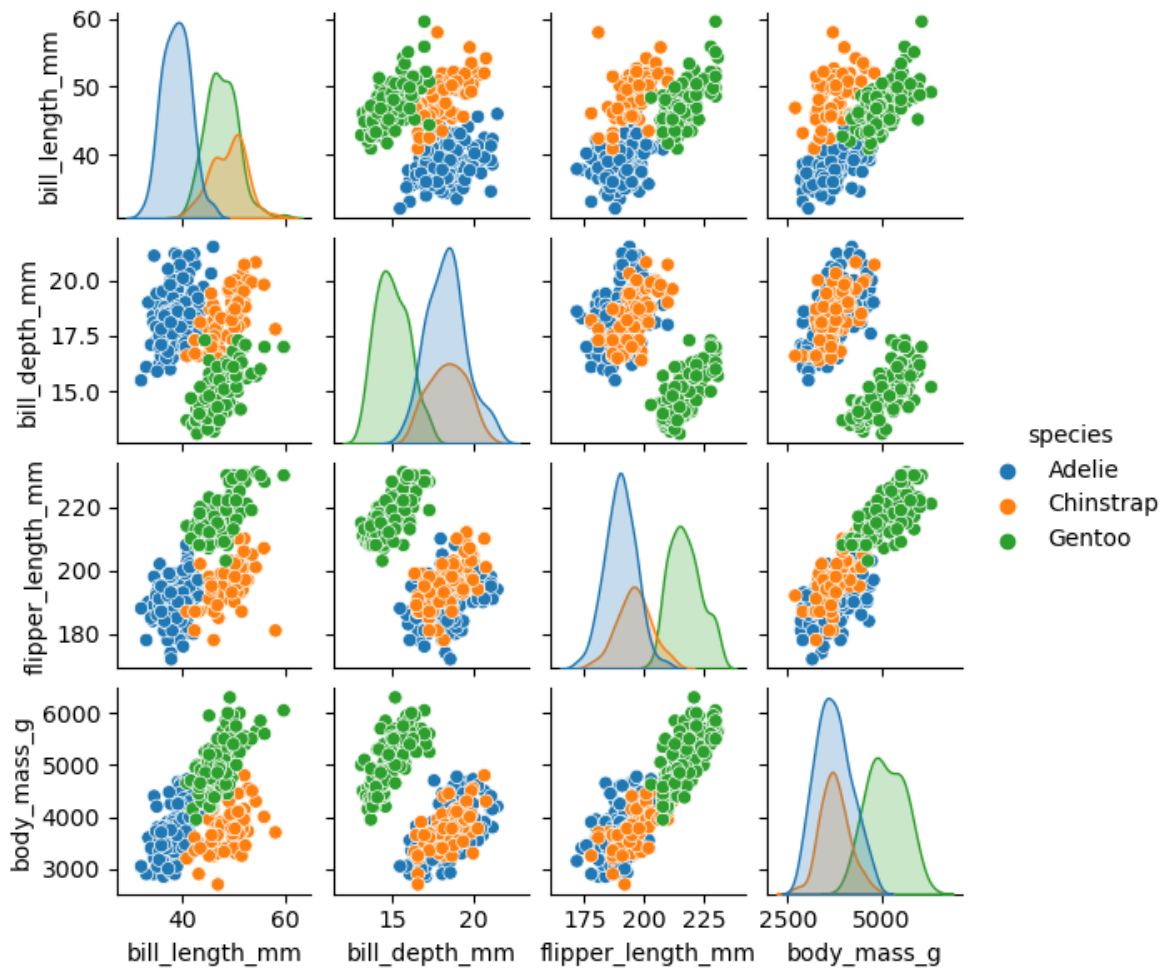


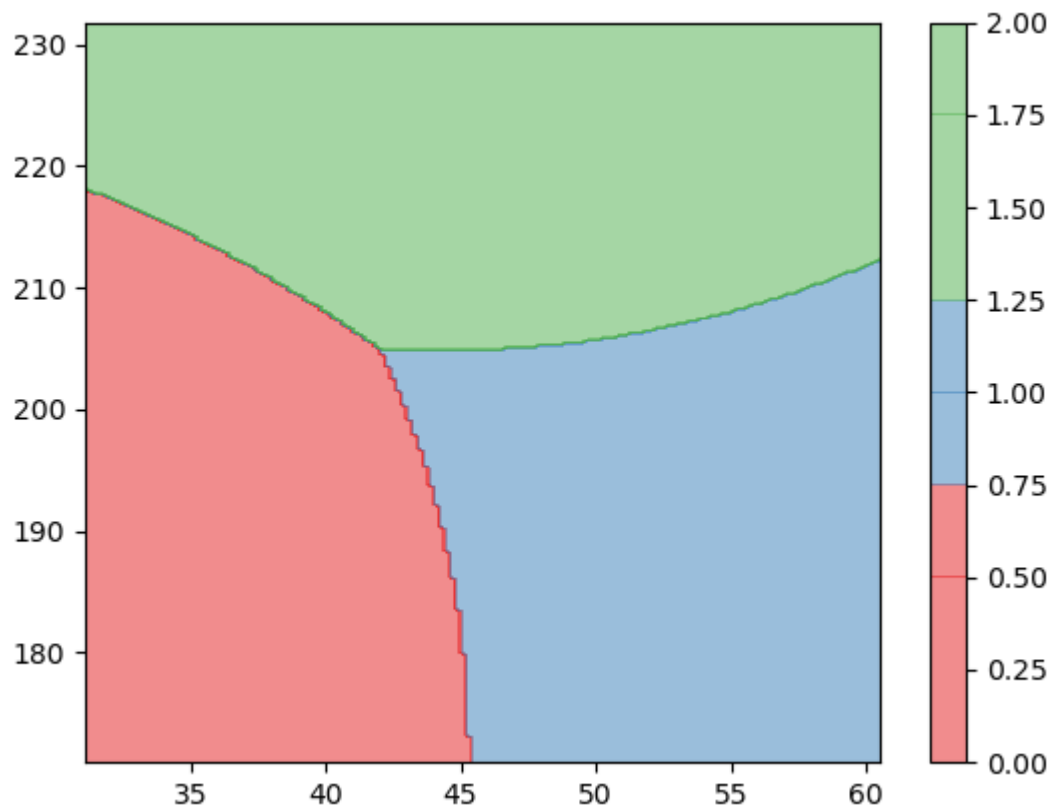
## EX4

### Task 1.1

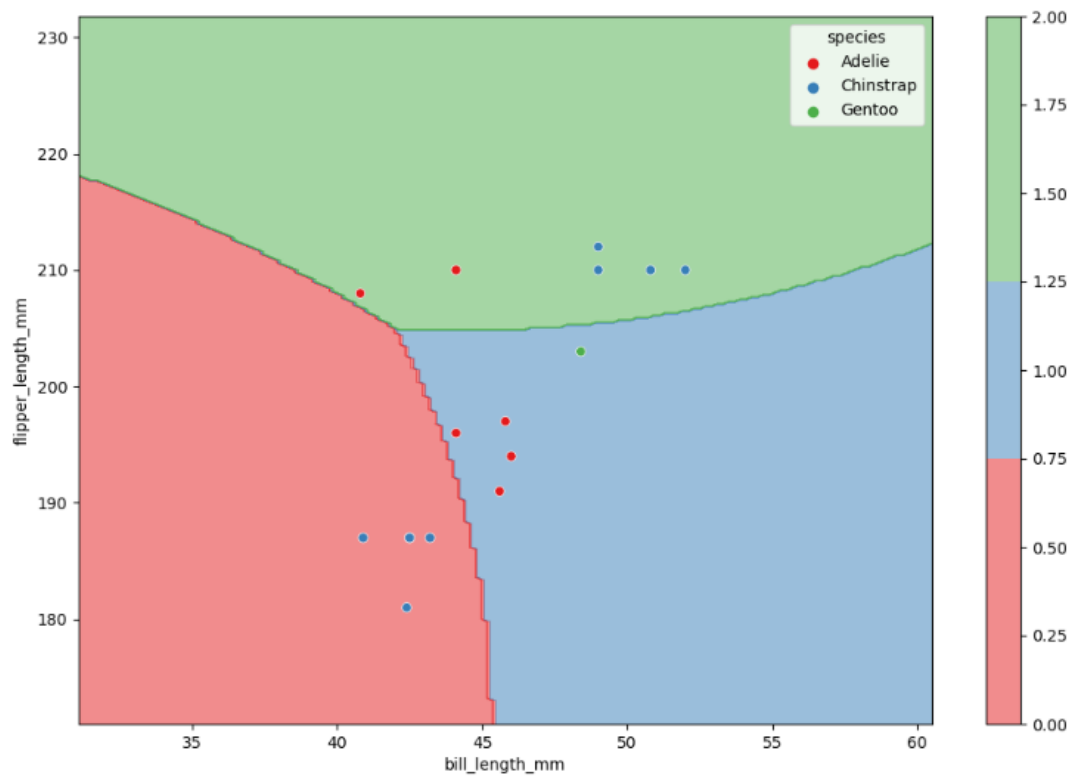


The two features which allow for the most accurate 2-feature GNB classifier were the **bill\_length\_mm** and **flipper\_length\_mm**. The bill\_length\_mm and flipper\_length\_mm has graphs that were accurate enough (0.95).

### Task 1.3



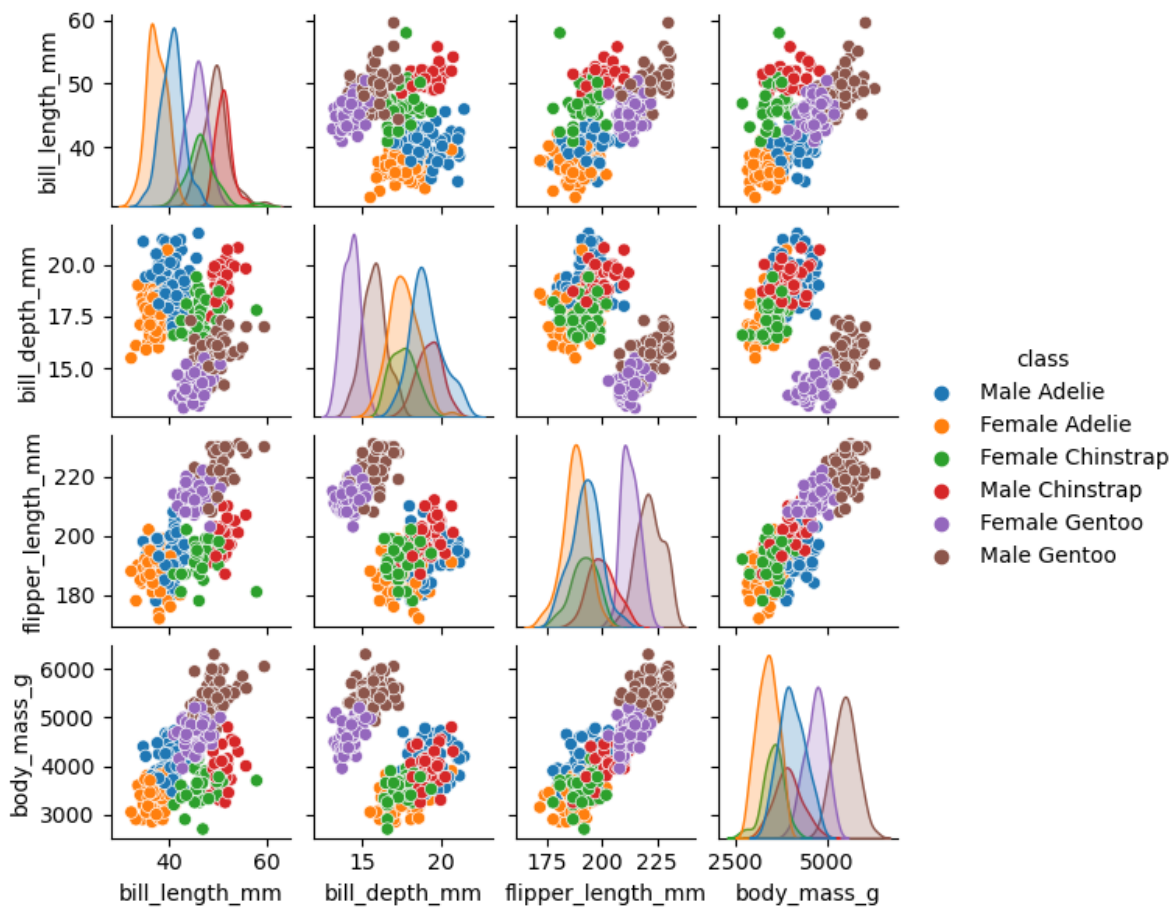
### Task 1.4



### Task 1.5

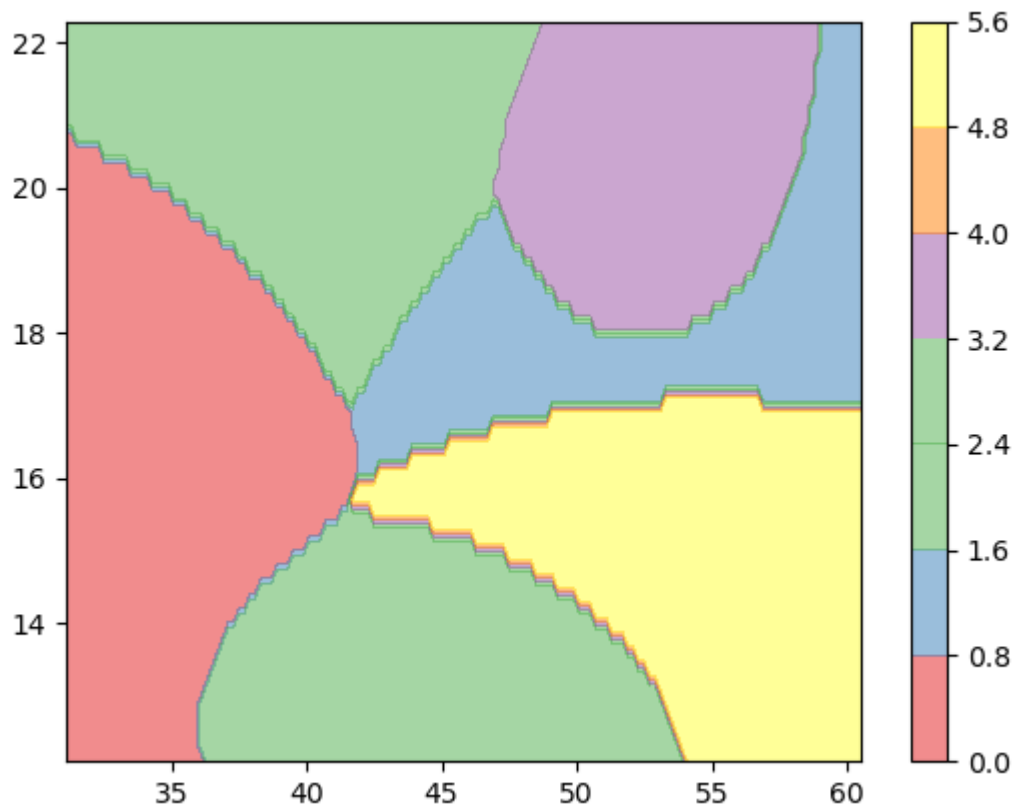
	precision	recall	f1-score	support
Adelie	1.00	0.93	0.96	28
Chinstrap	0.94	0.94	0.94	17
Gentoo	0.92	1.00	0.96	22
accuracy			0.96	67
macro avg	0.95	0.96	0.95	67
weighted avg	0.96	0.96	0.96	67

## Task 2.1

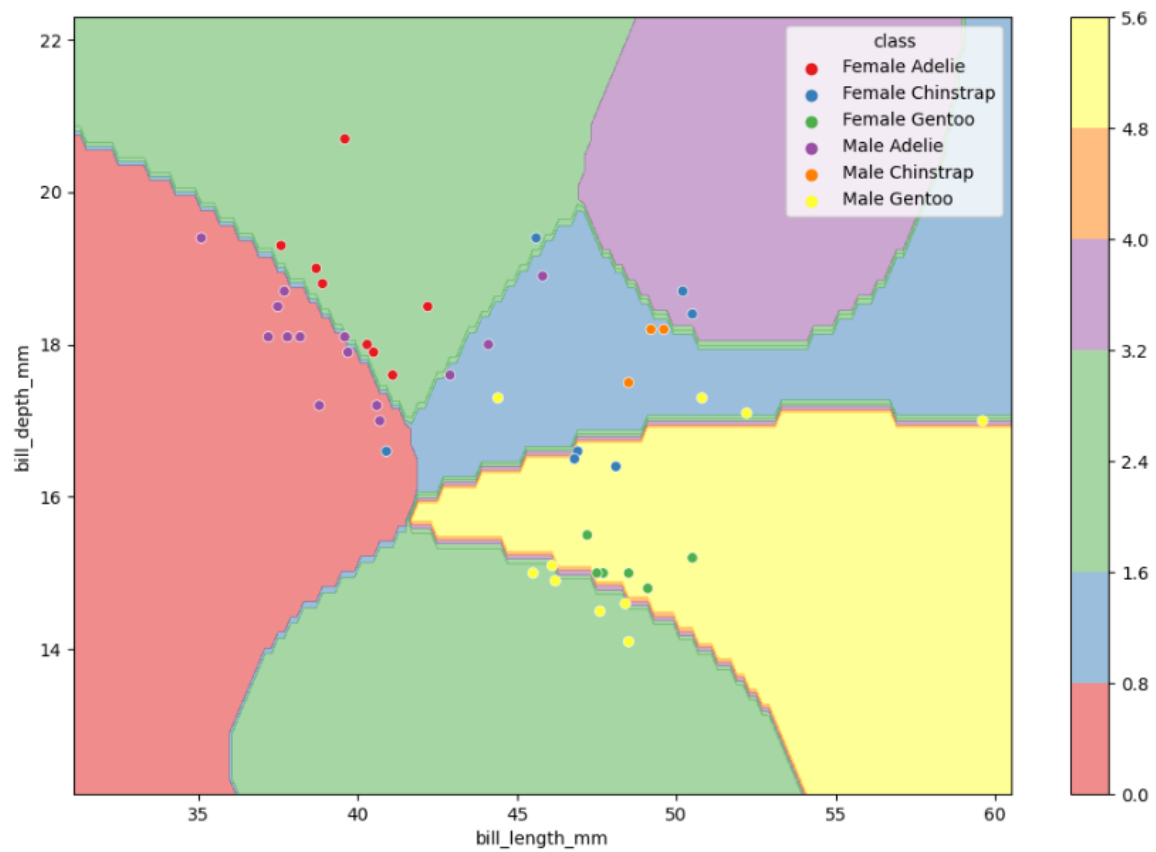


The two features which allow for the most accurate 2-feature GNB classifier were the **bill\_length\_mm** and **bill\_depth\_mm**. The **bill\_length\_mm** and **bill\_depth\_mm** has graphs that were accurate enough (0.85). The **bill\_length\_mm** and **bill\_depth\_mm** graphs were separated, and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