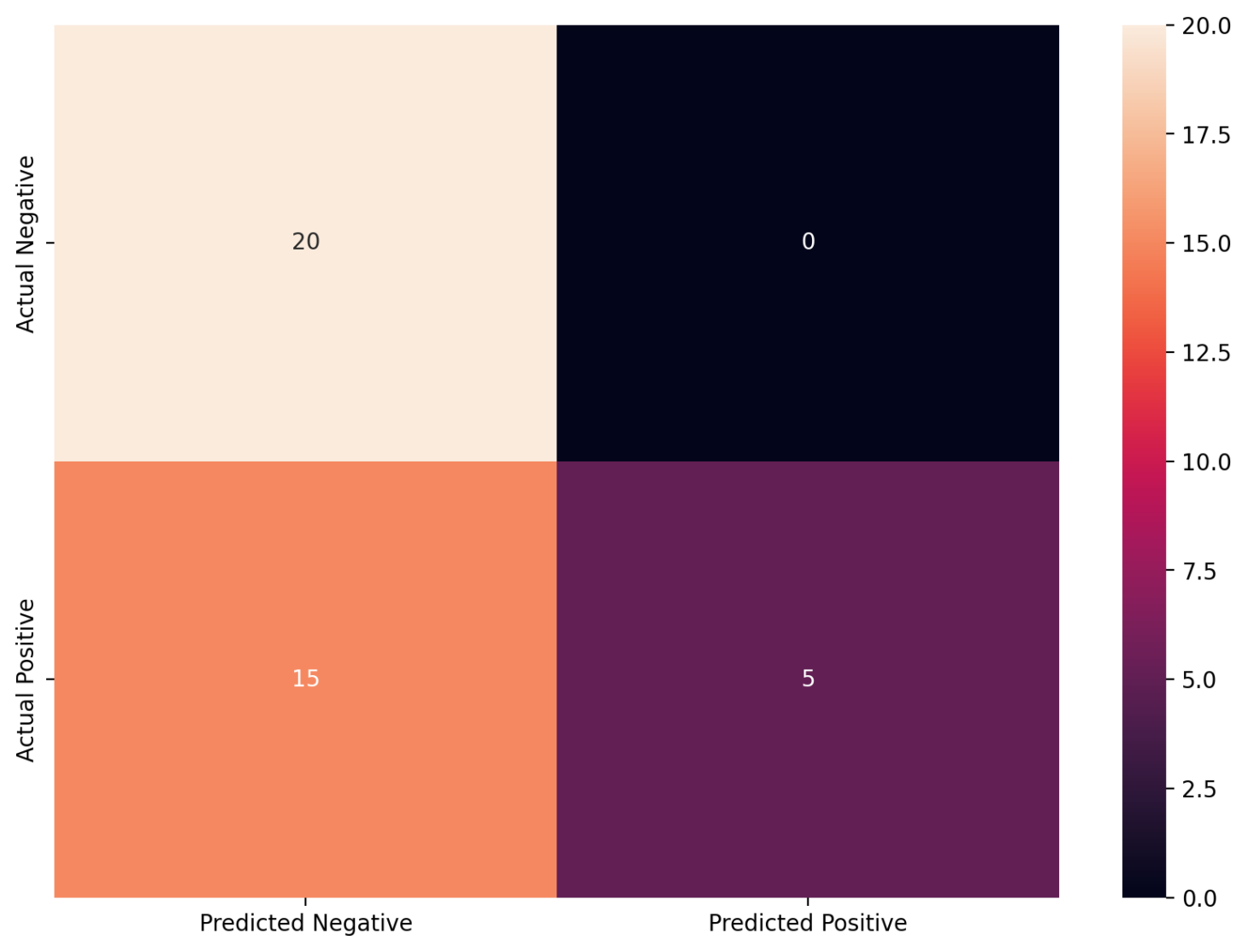
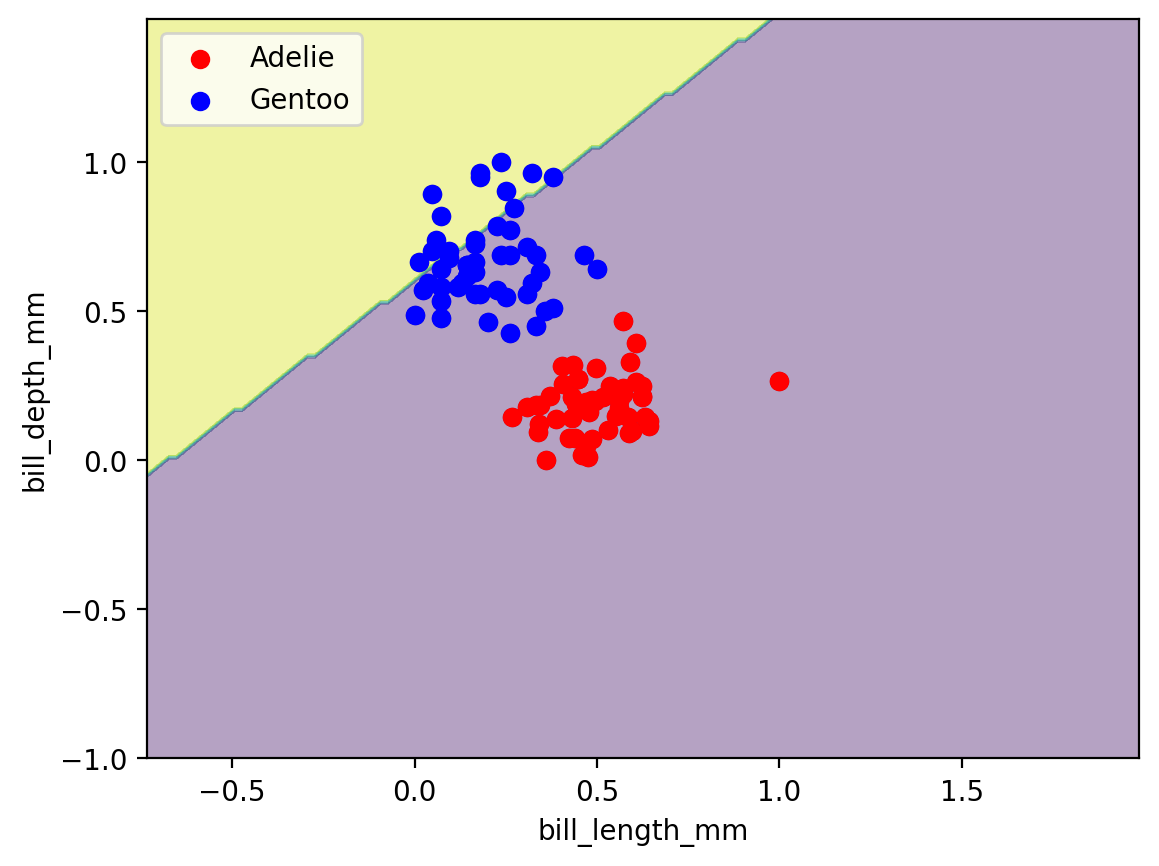
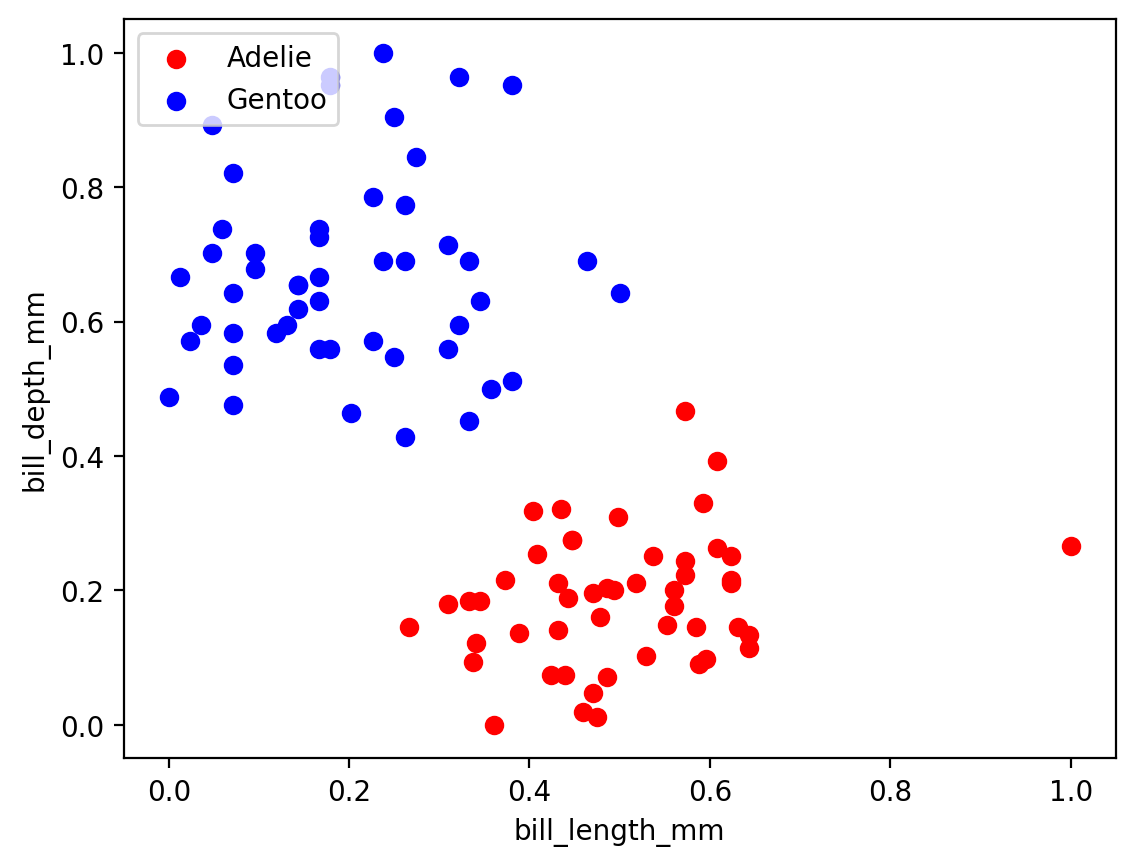
Task2- Adaline Learning Algorithm Using MSE

Team - SC\_H22

| Name | ID |
| --- | --- |
| نورا إكرامى على يوسف | 20191700703 |
| نورهان محمود أحمد السيد | 20191700718 |
| أيمن حسن توفيق | 20191700160 |

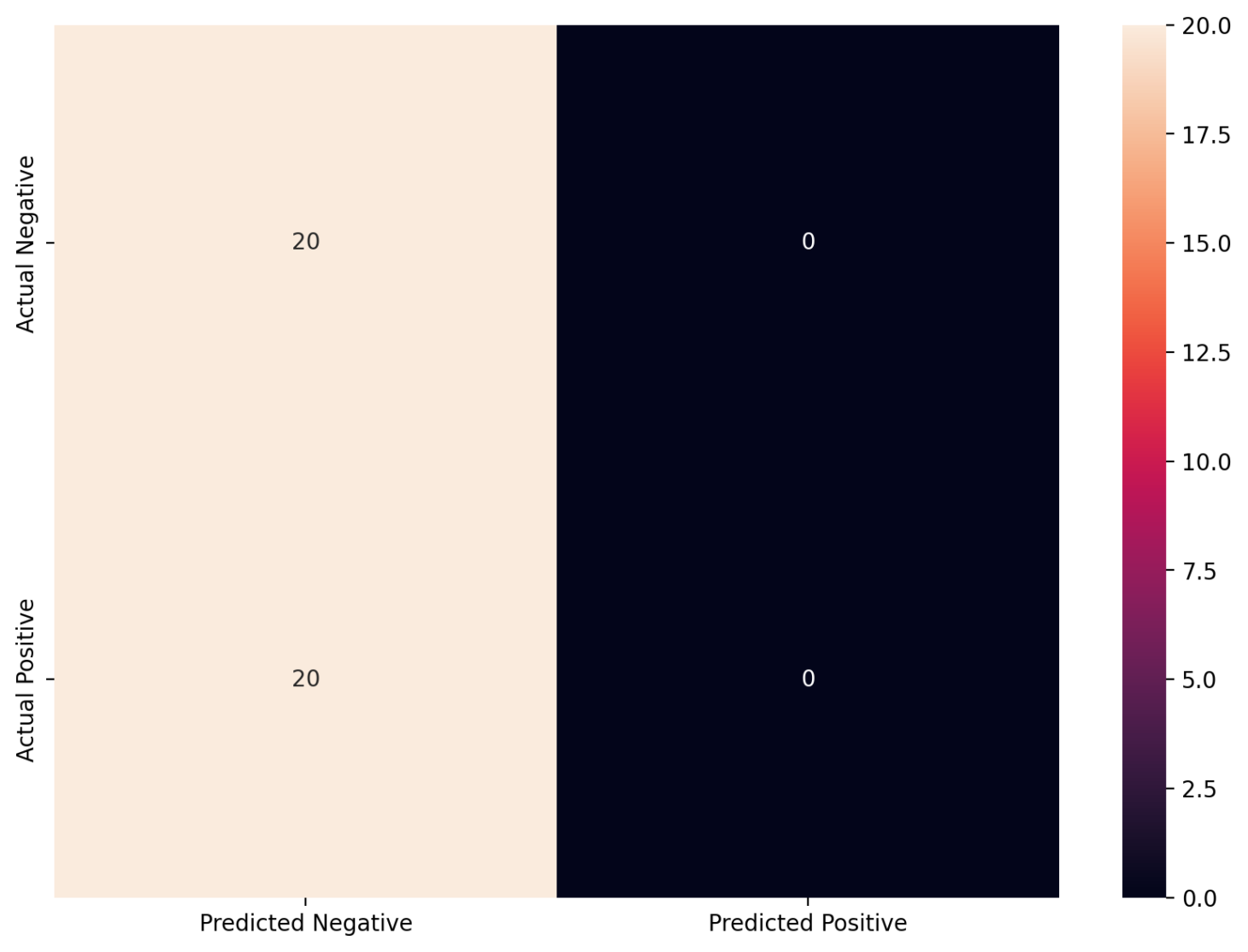
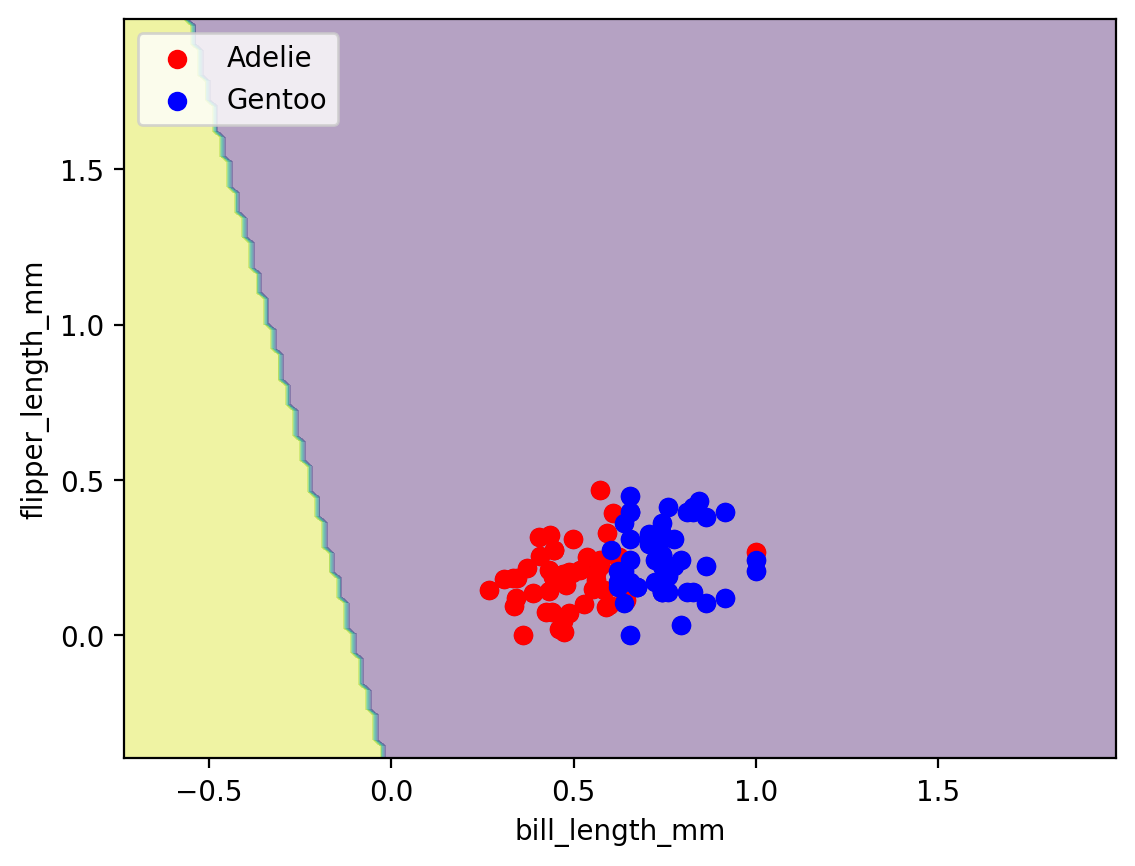
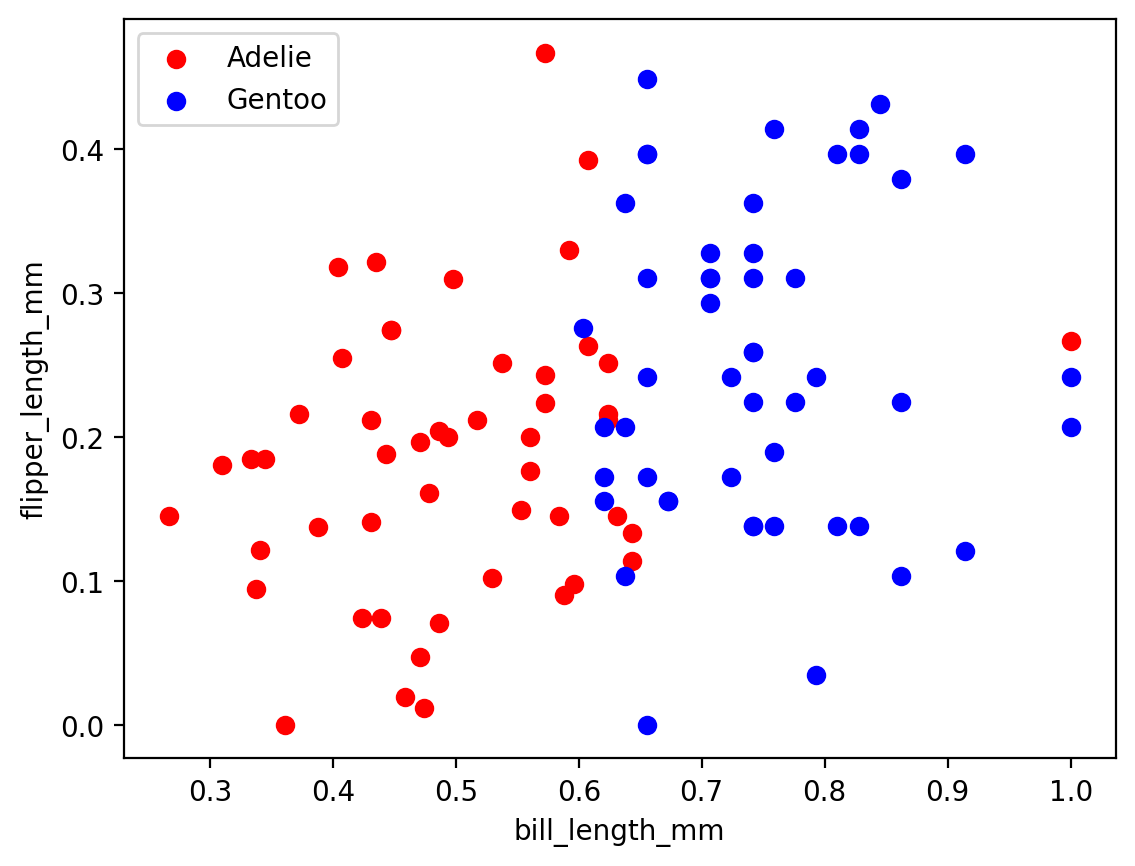
# Adelie and Gentoo

### bill\_length\_mm , bill\_depth\_mm



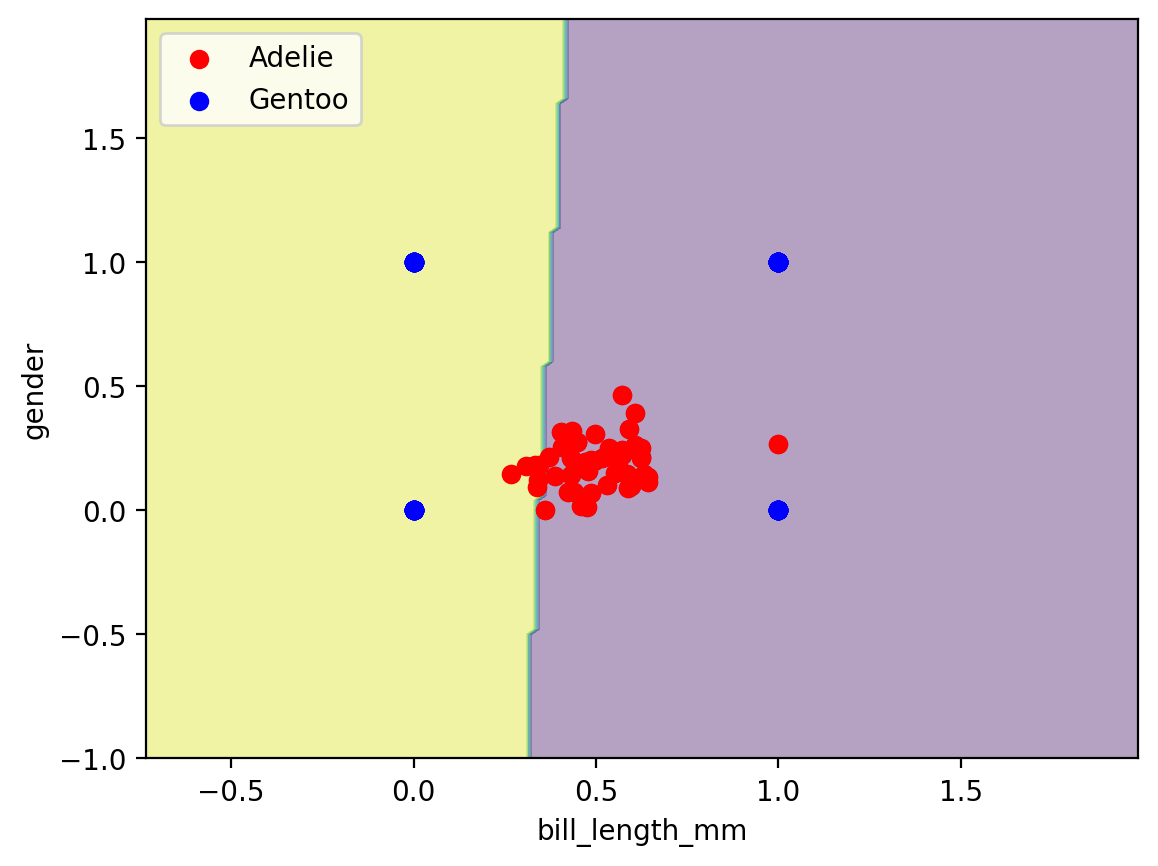
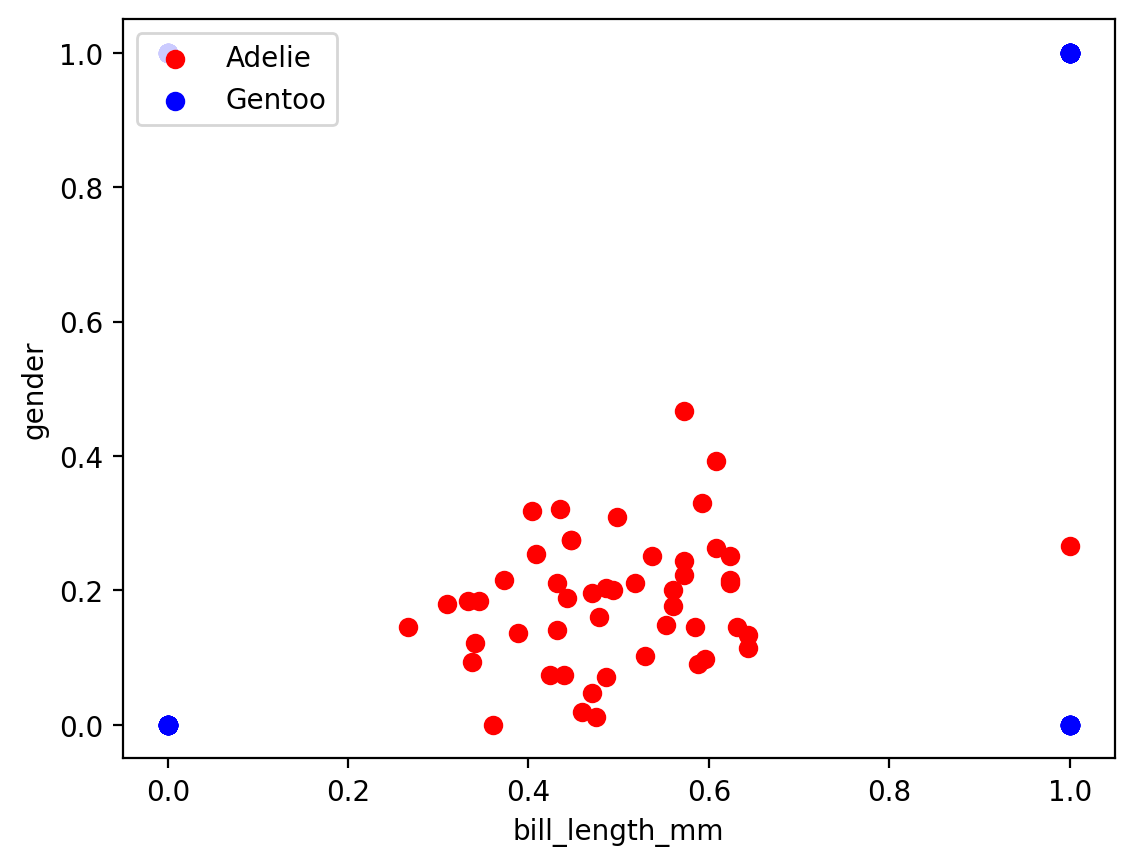
**Comment:**test accuracy = 0.625

### bill\_length\_mm, flipper\_length\_mm



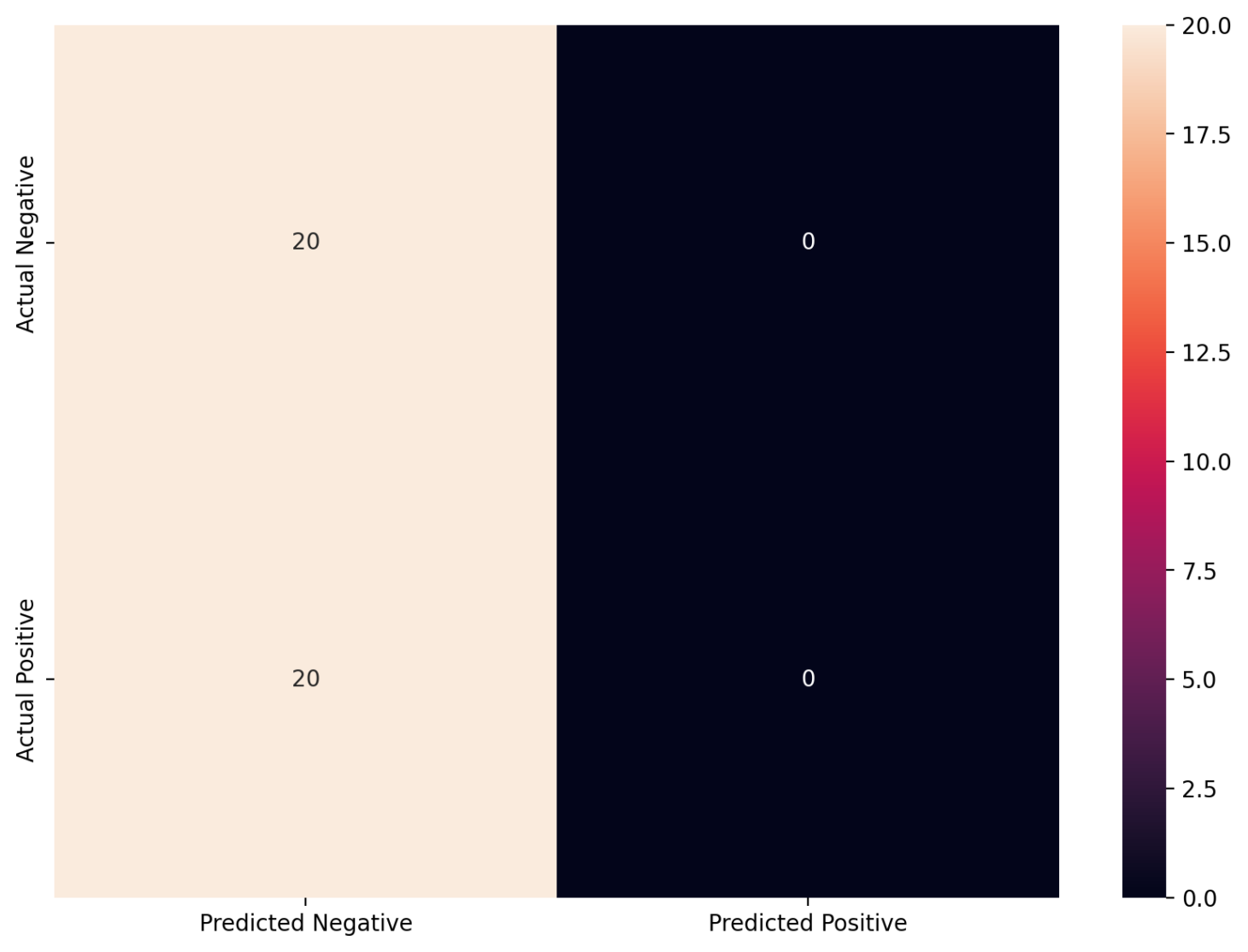
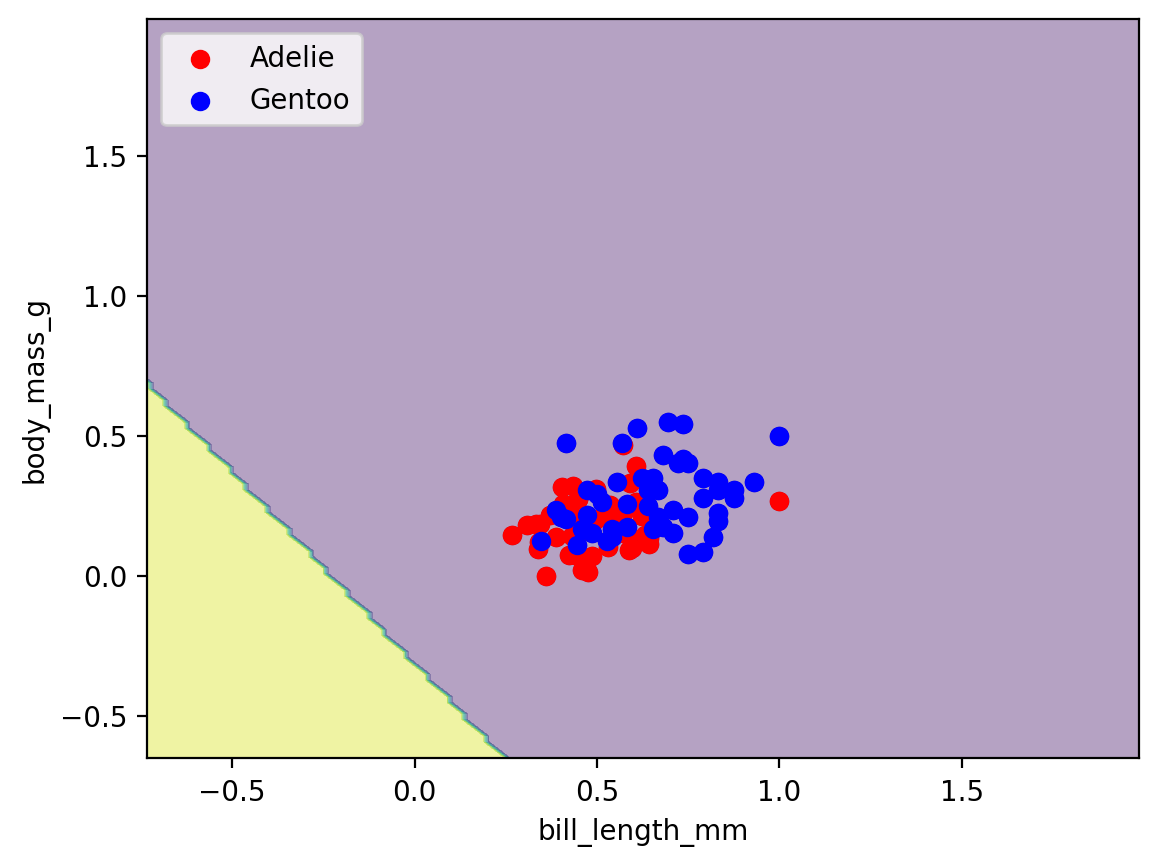
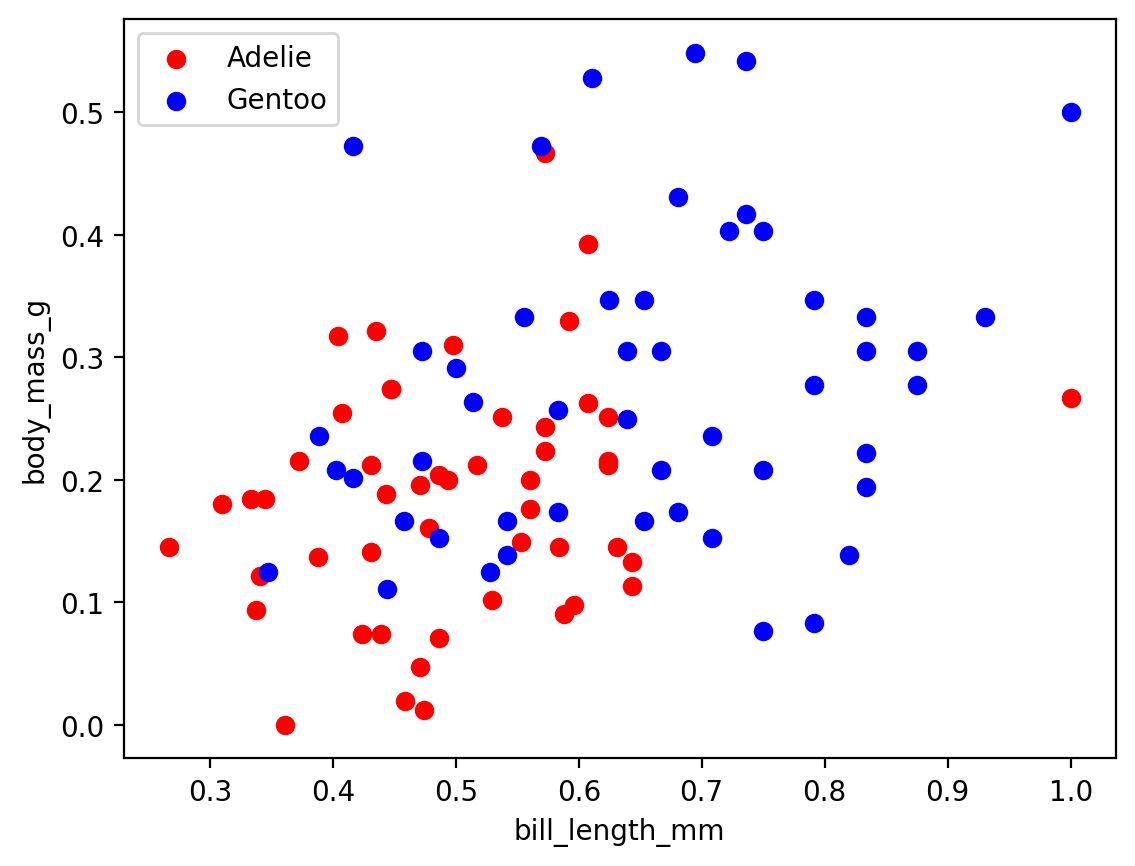
**Comment:** test accuracy = 0.5

### bill\_length\_mm , gender



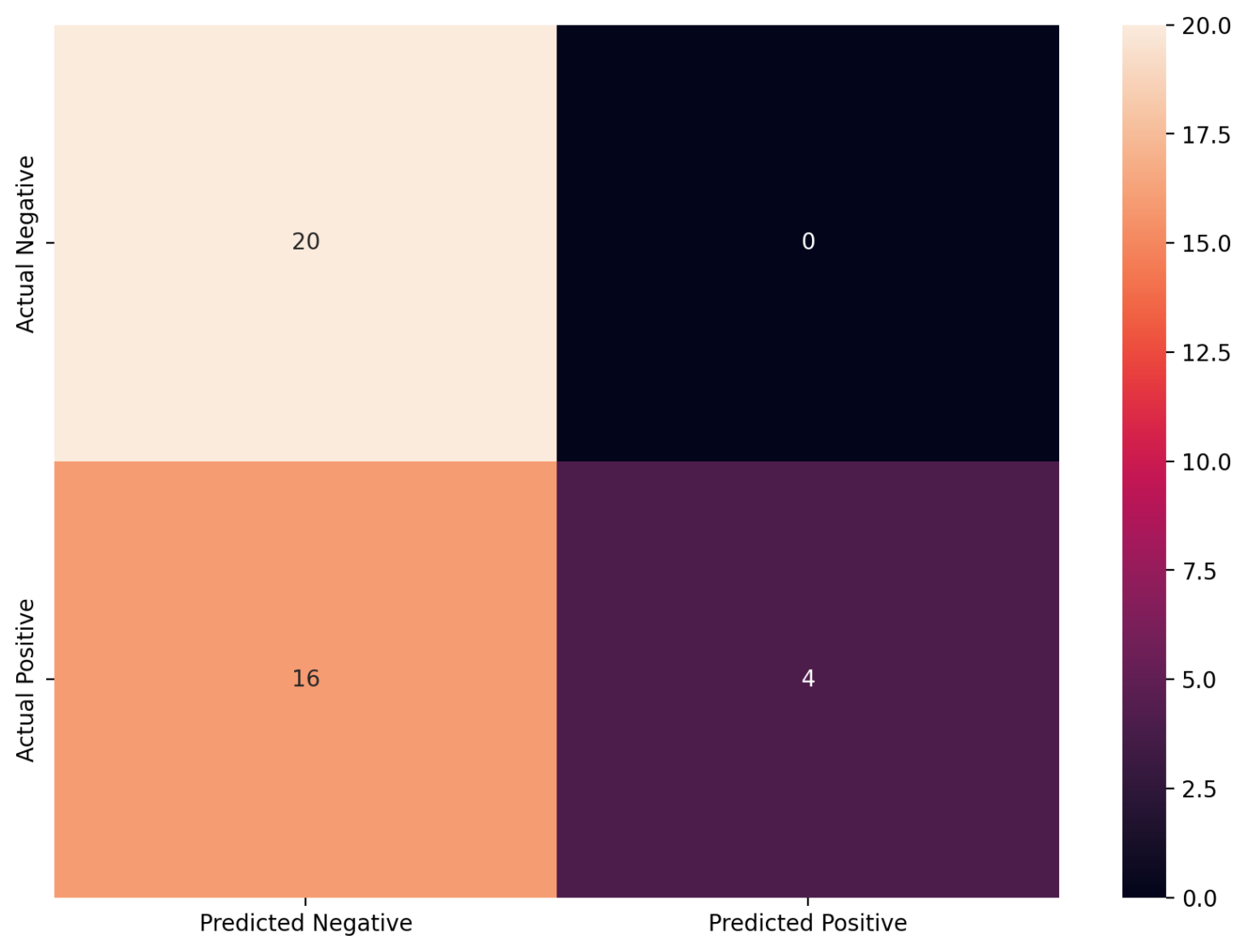
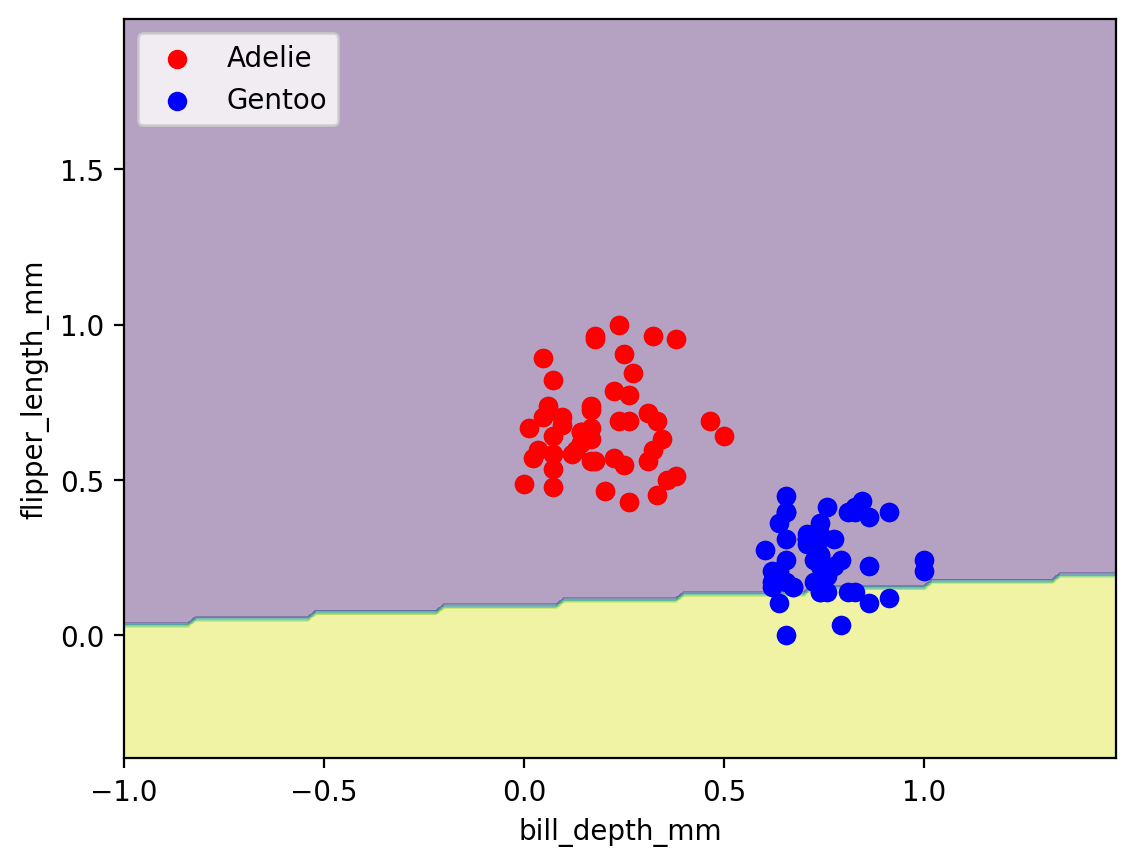
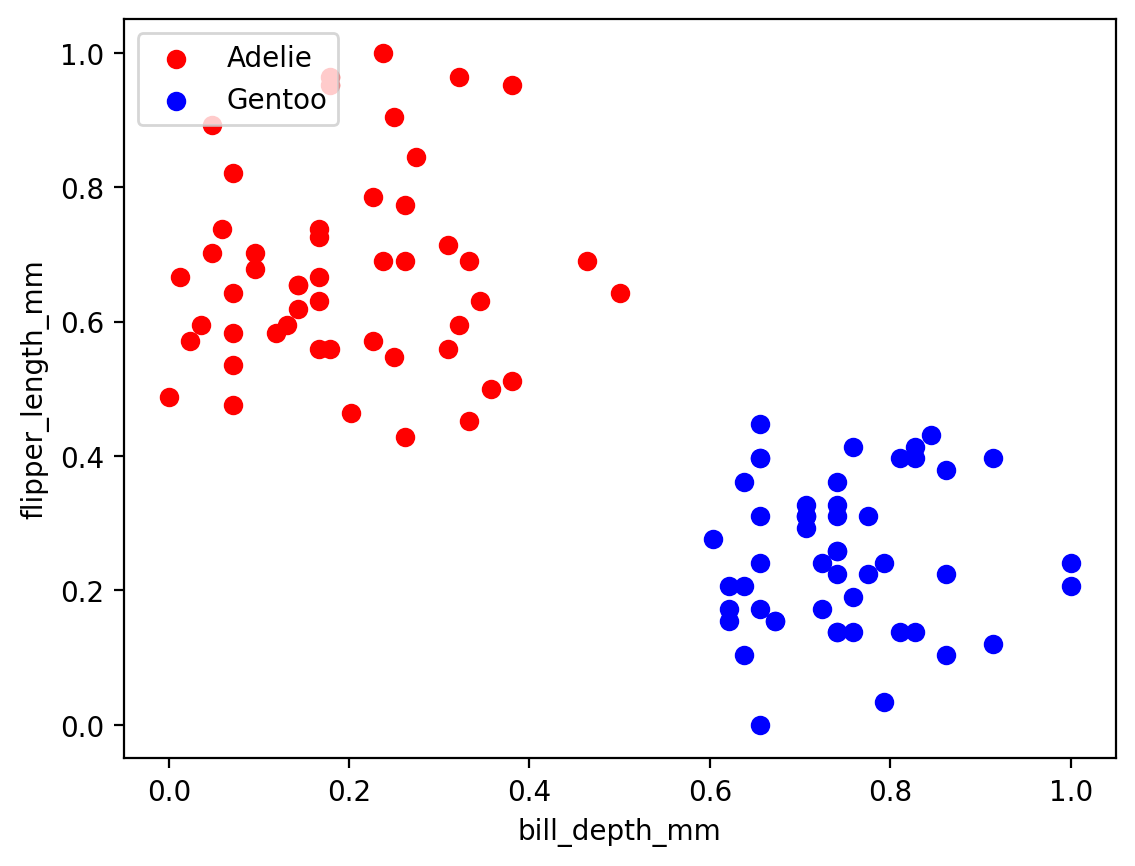
**Comment:** test accuracy = 0.925

### bill\_length\_mm , body\_mass\_g



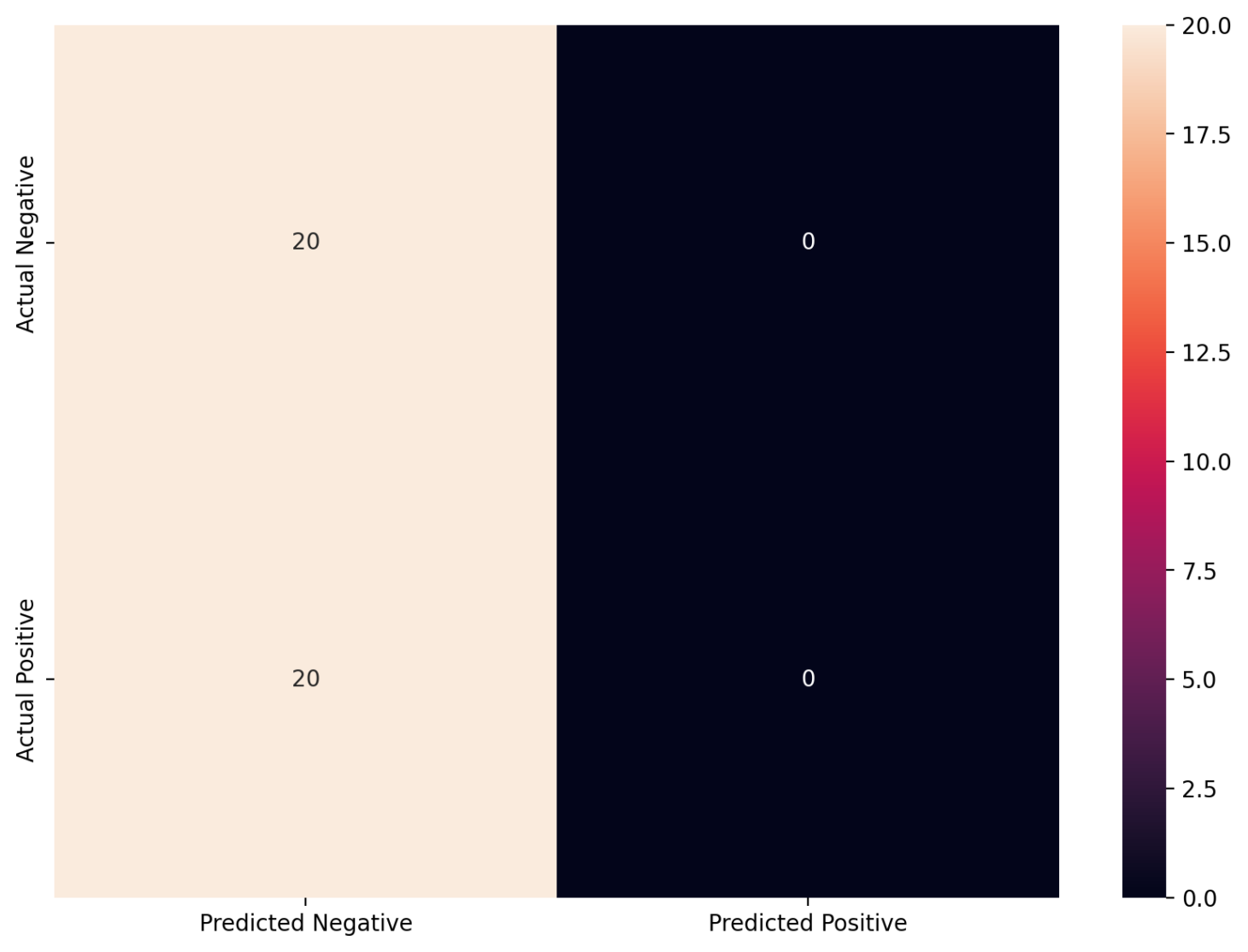
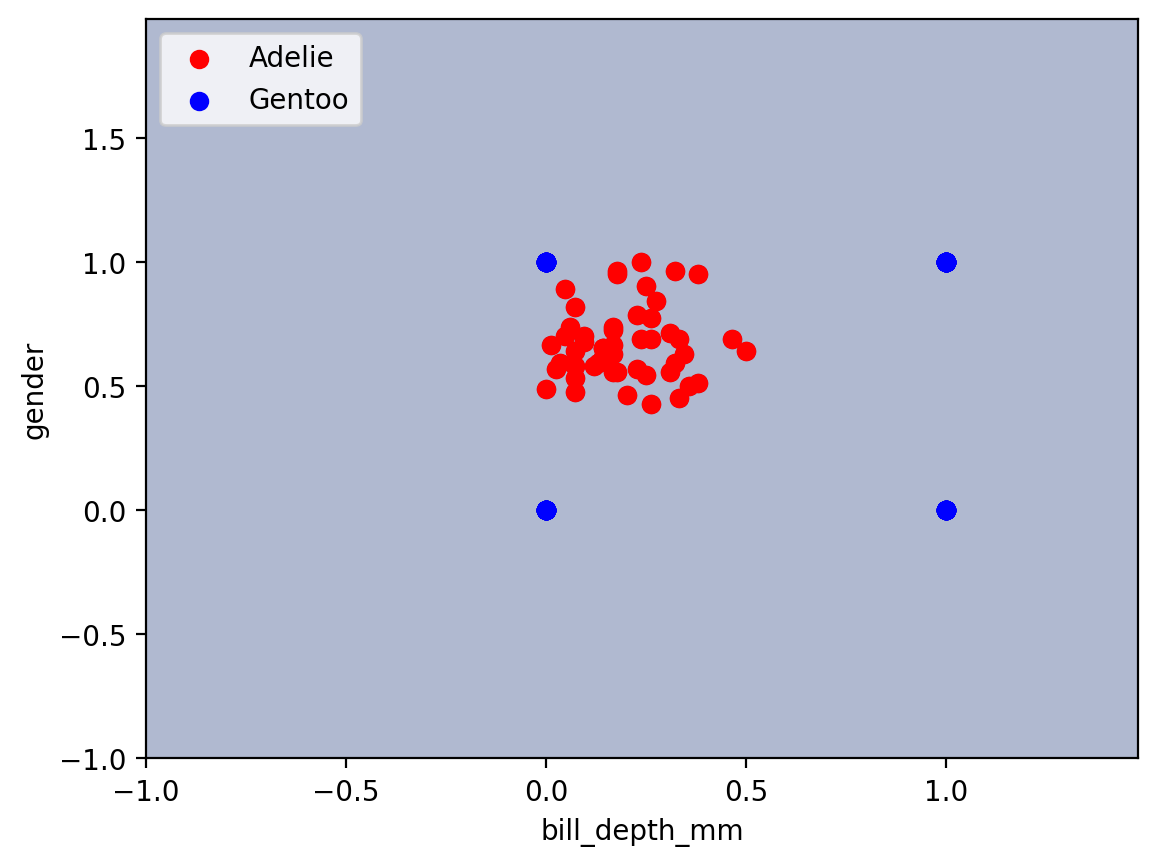
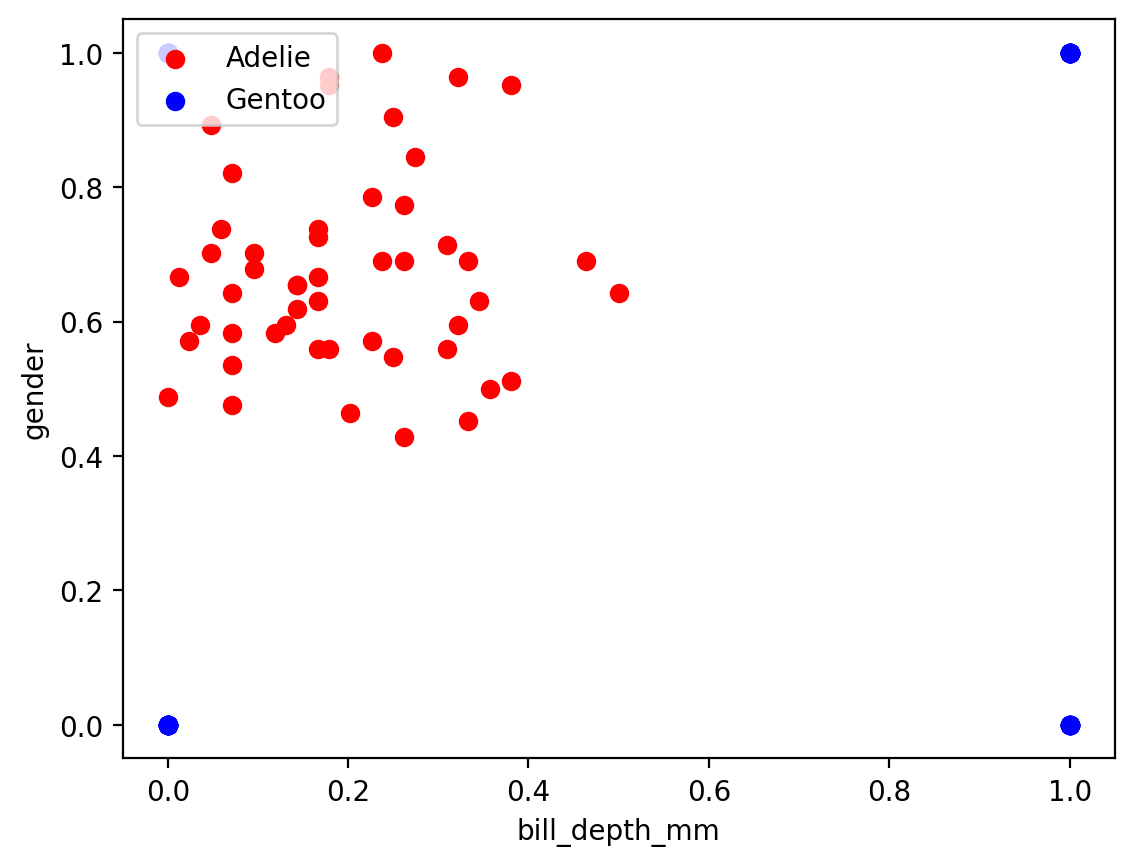
**Comment:** test accuracy =0.5

bill\_depth\_mm , flipper\_length\_mm



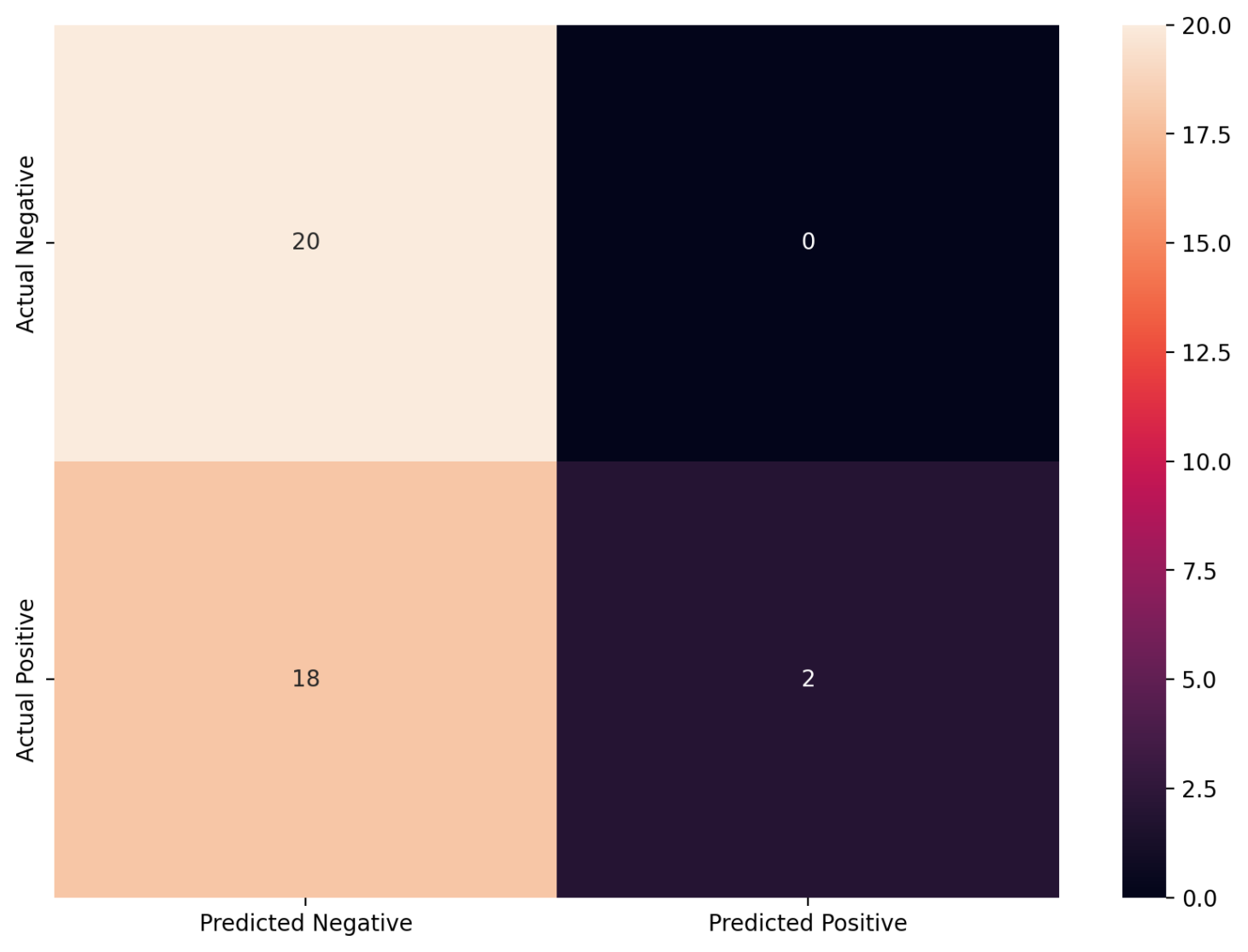
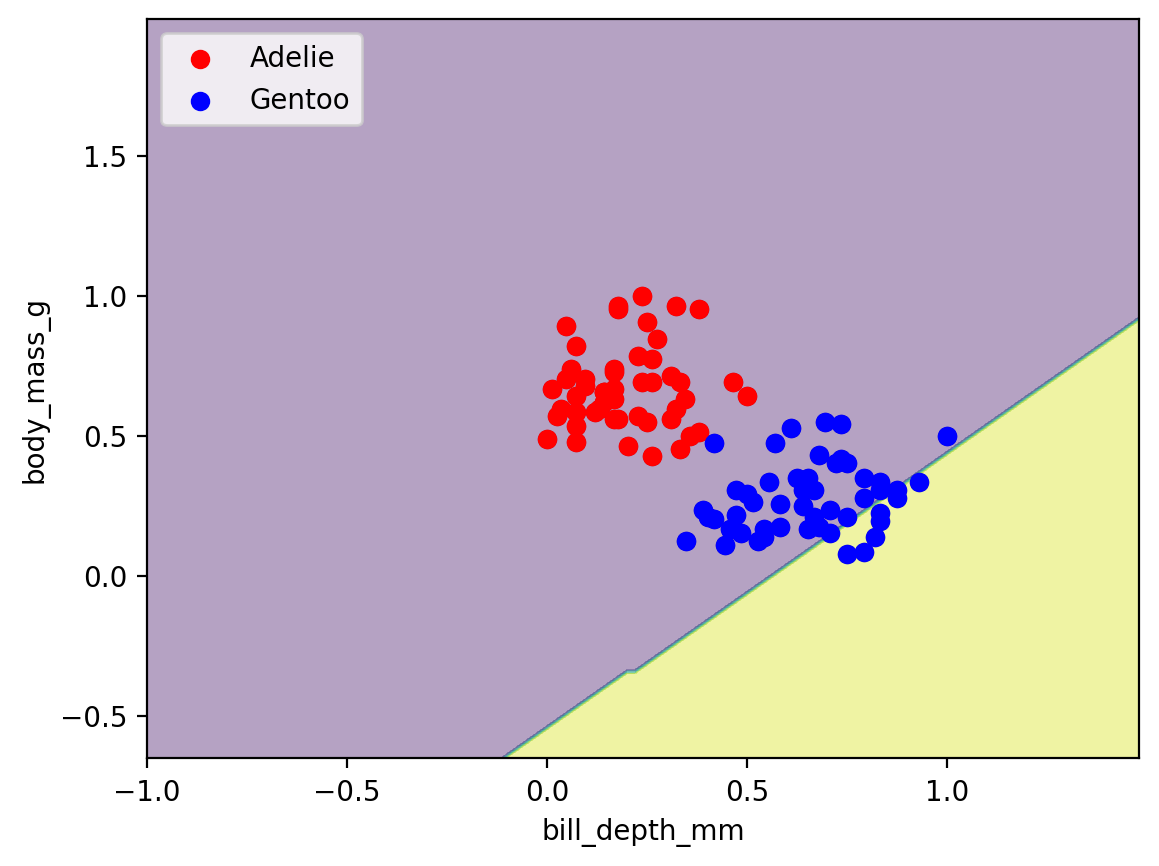
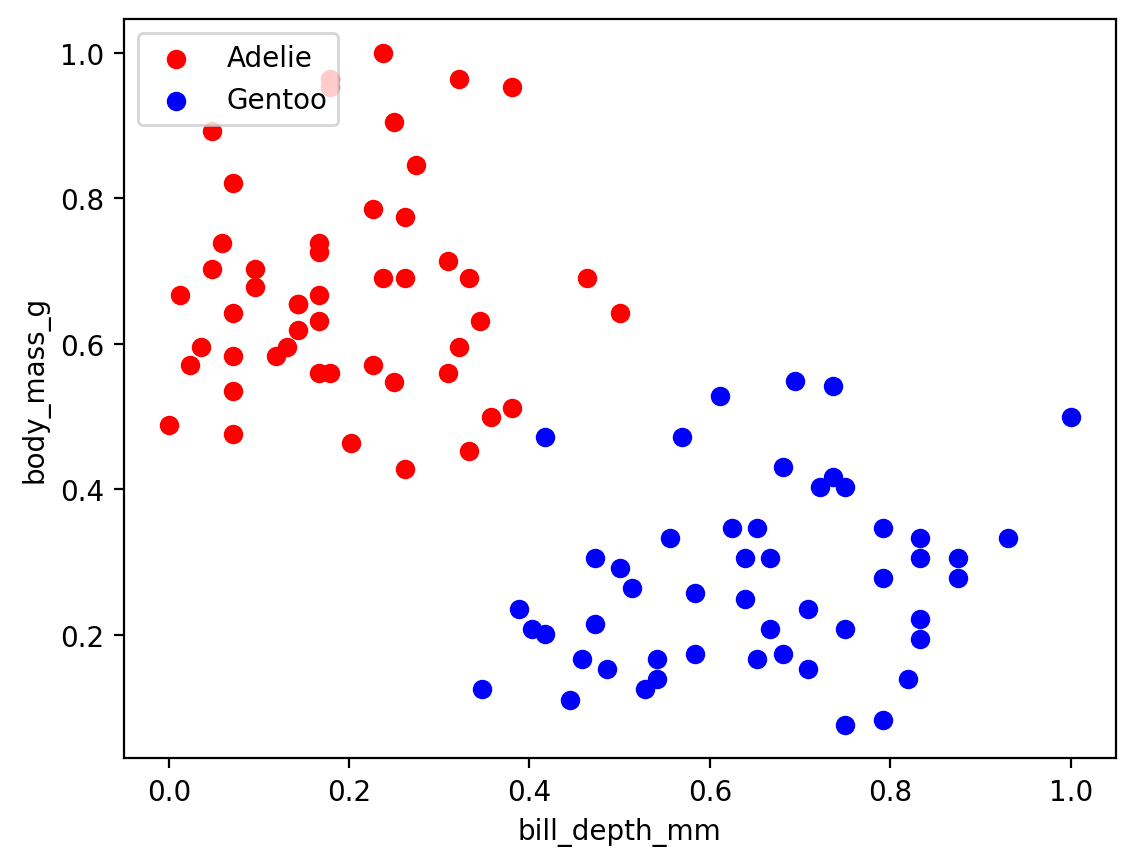
**Comment:** test accuracy = 0.6

bill\_depth\_mm , gender



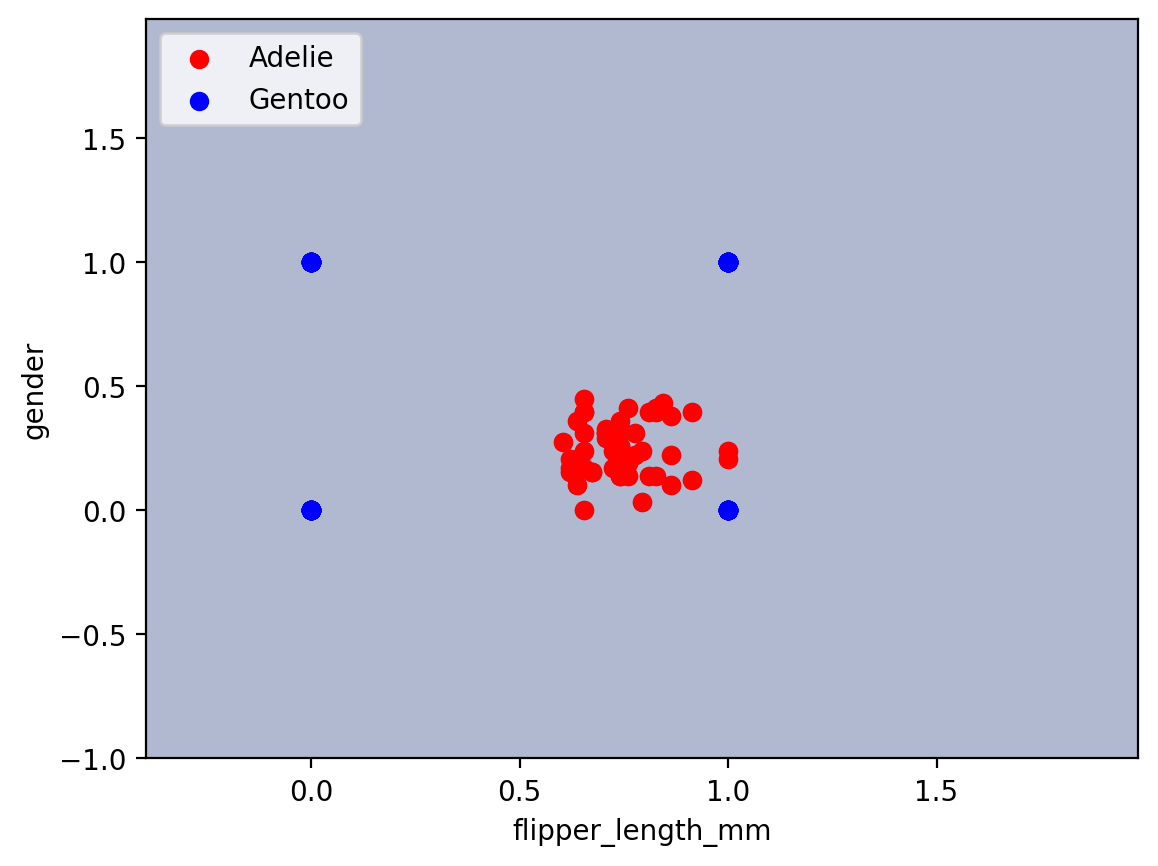
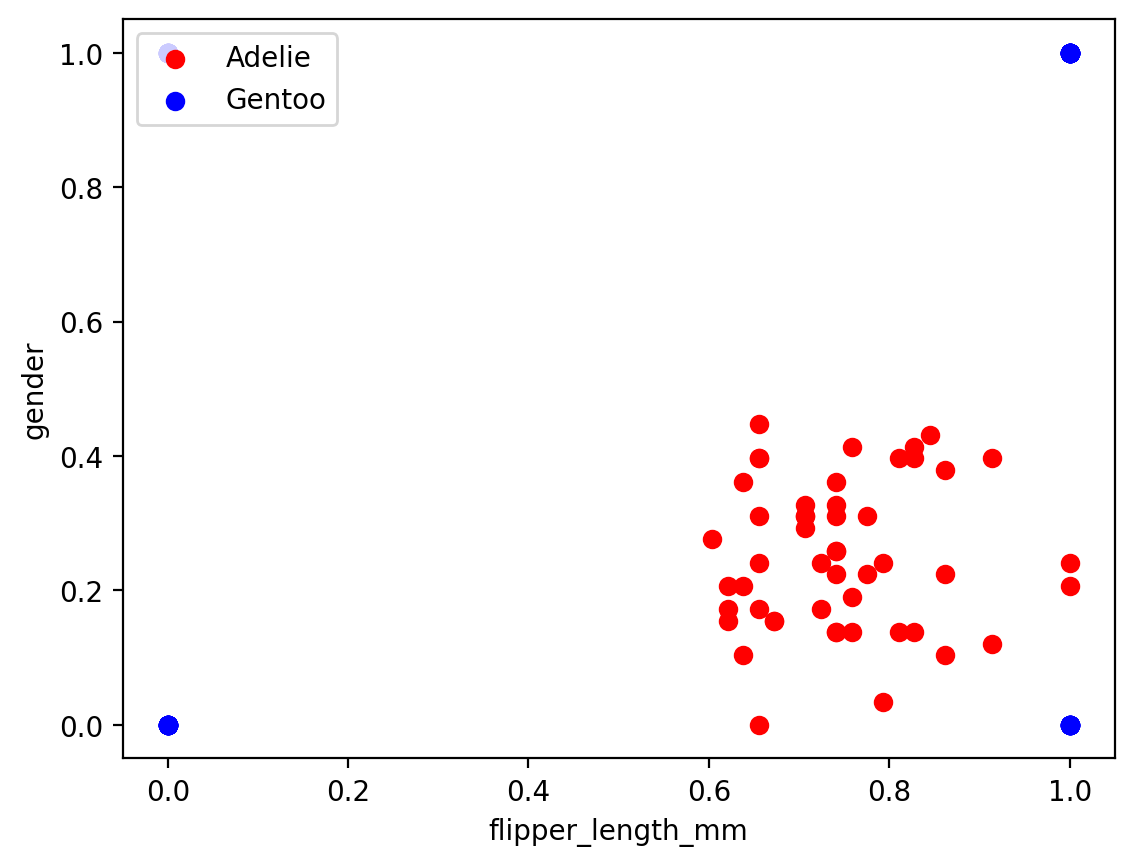
**Comment:** test accuracy = 0.5

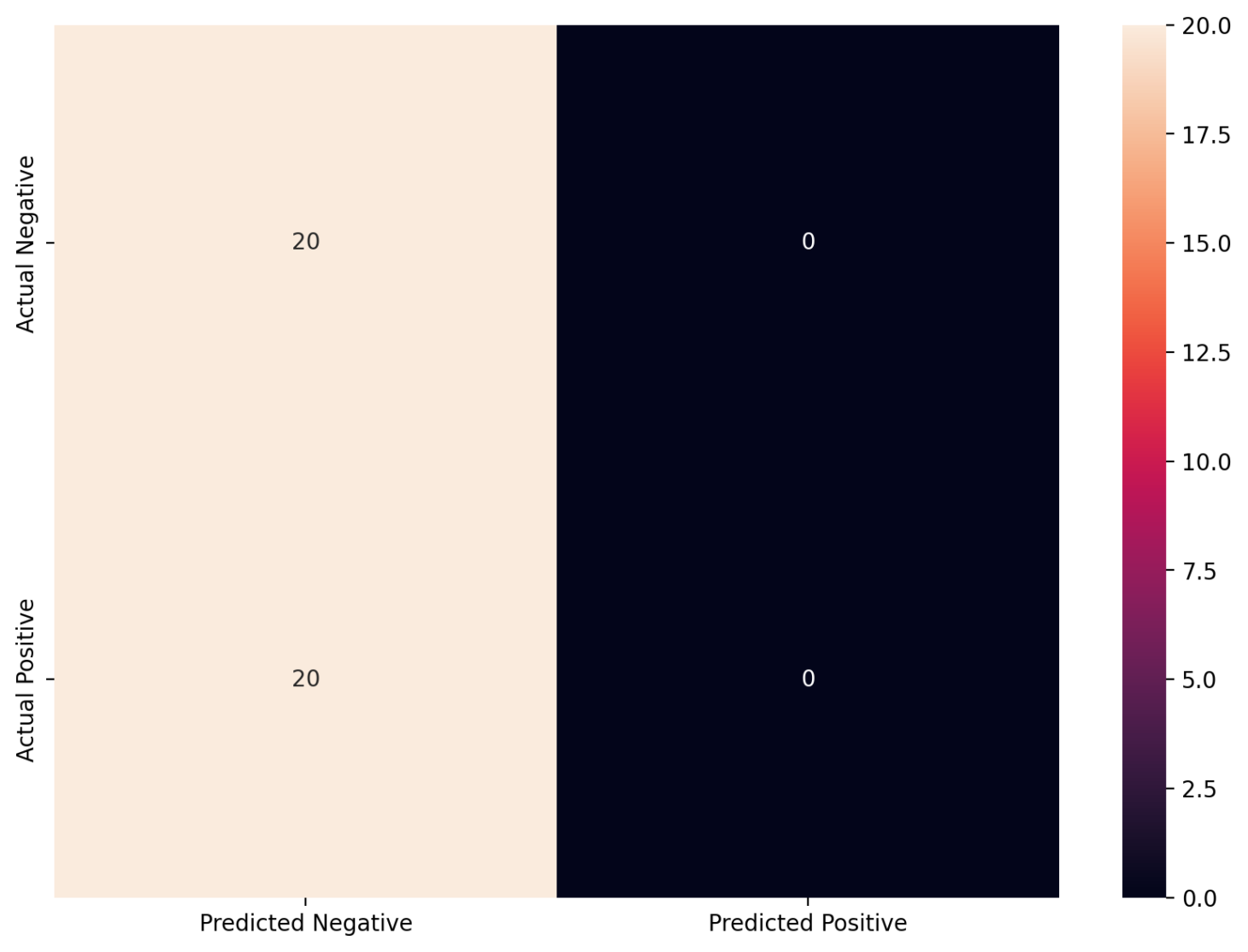
### bill\_depth\_mm , body\_mass\_g



**Comment :** test accuracy = 0.55

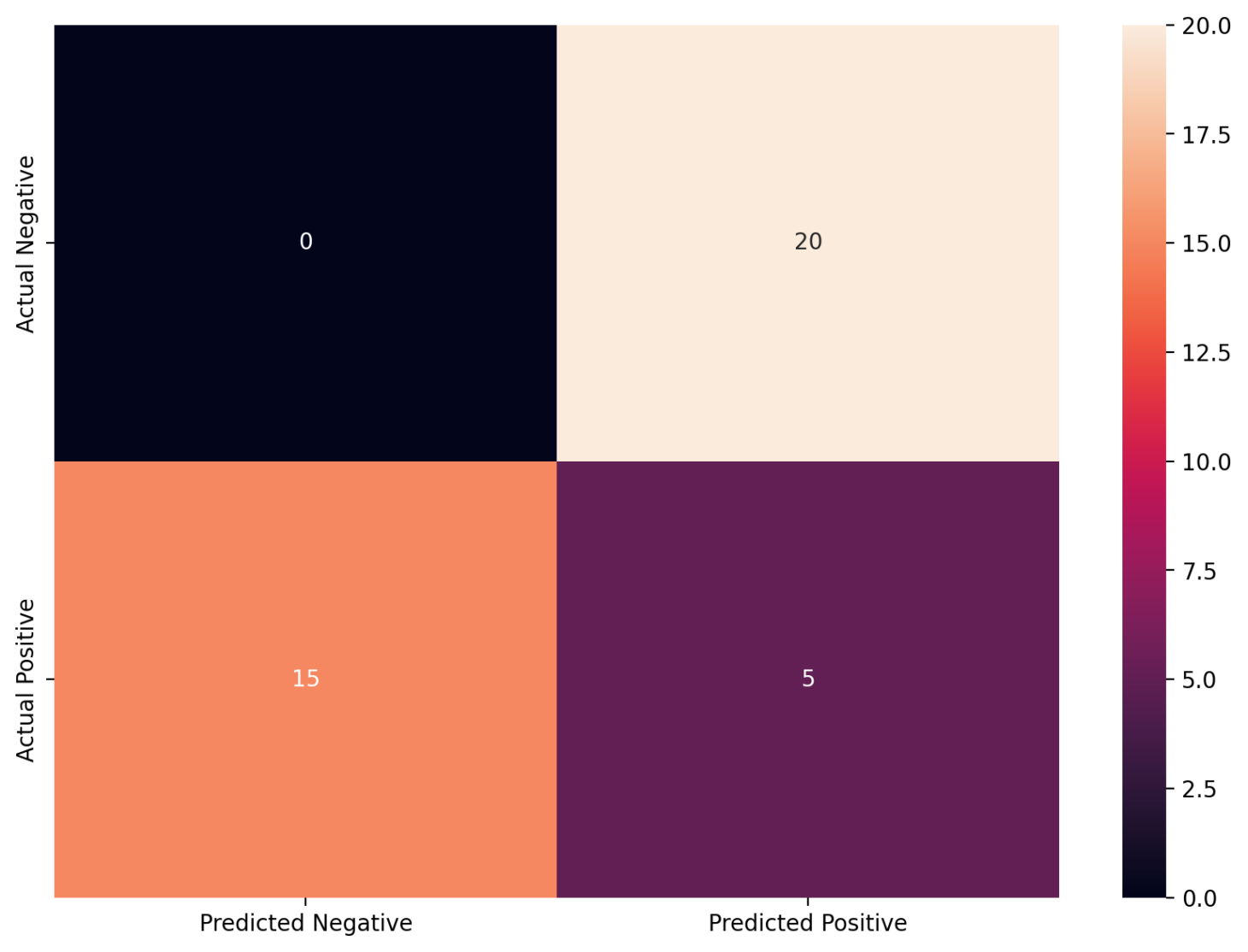
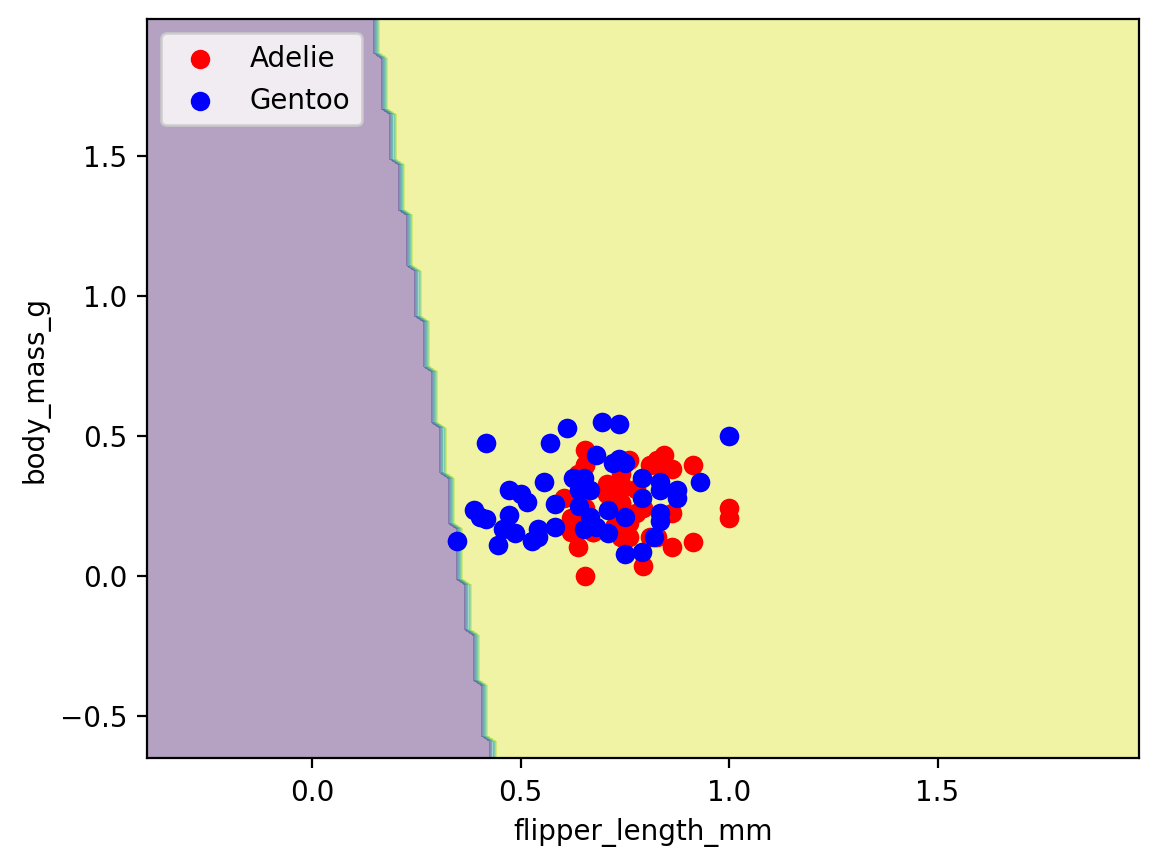
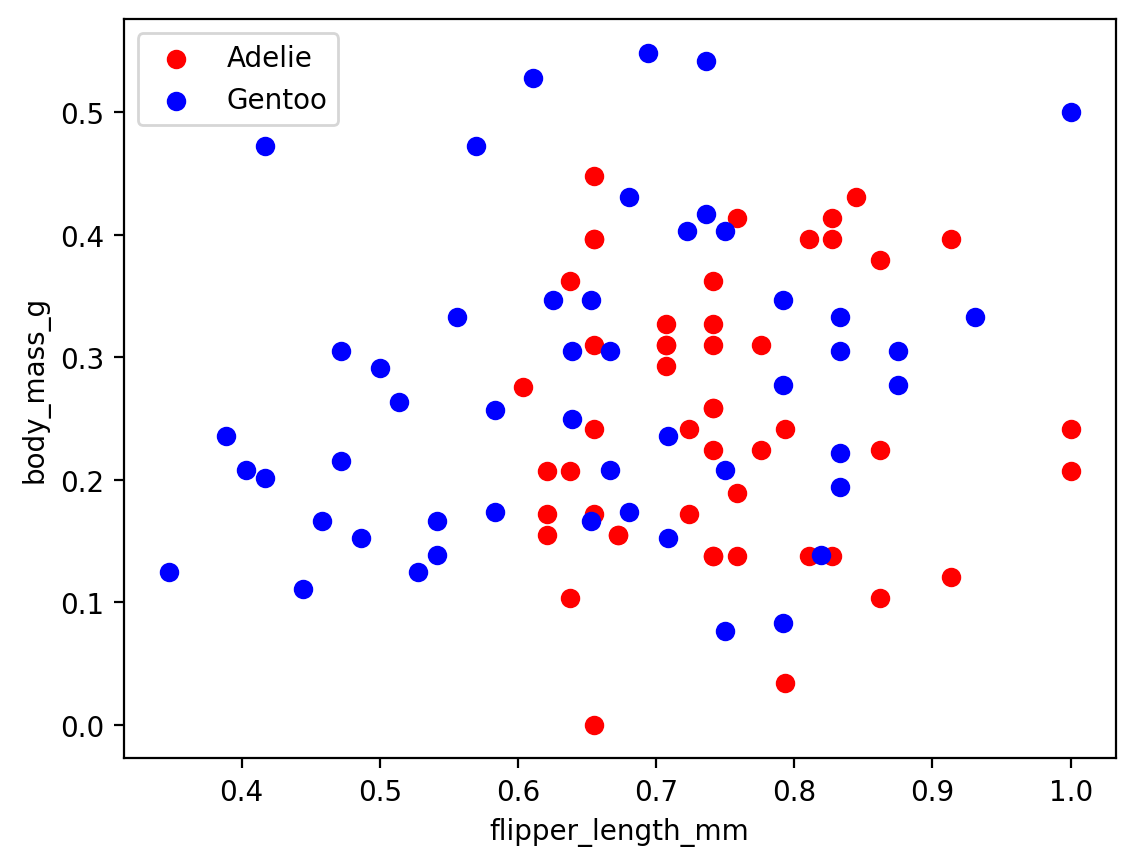
### flipper\_length\_mm , gender





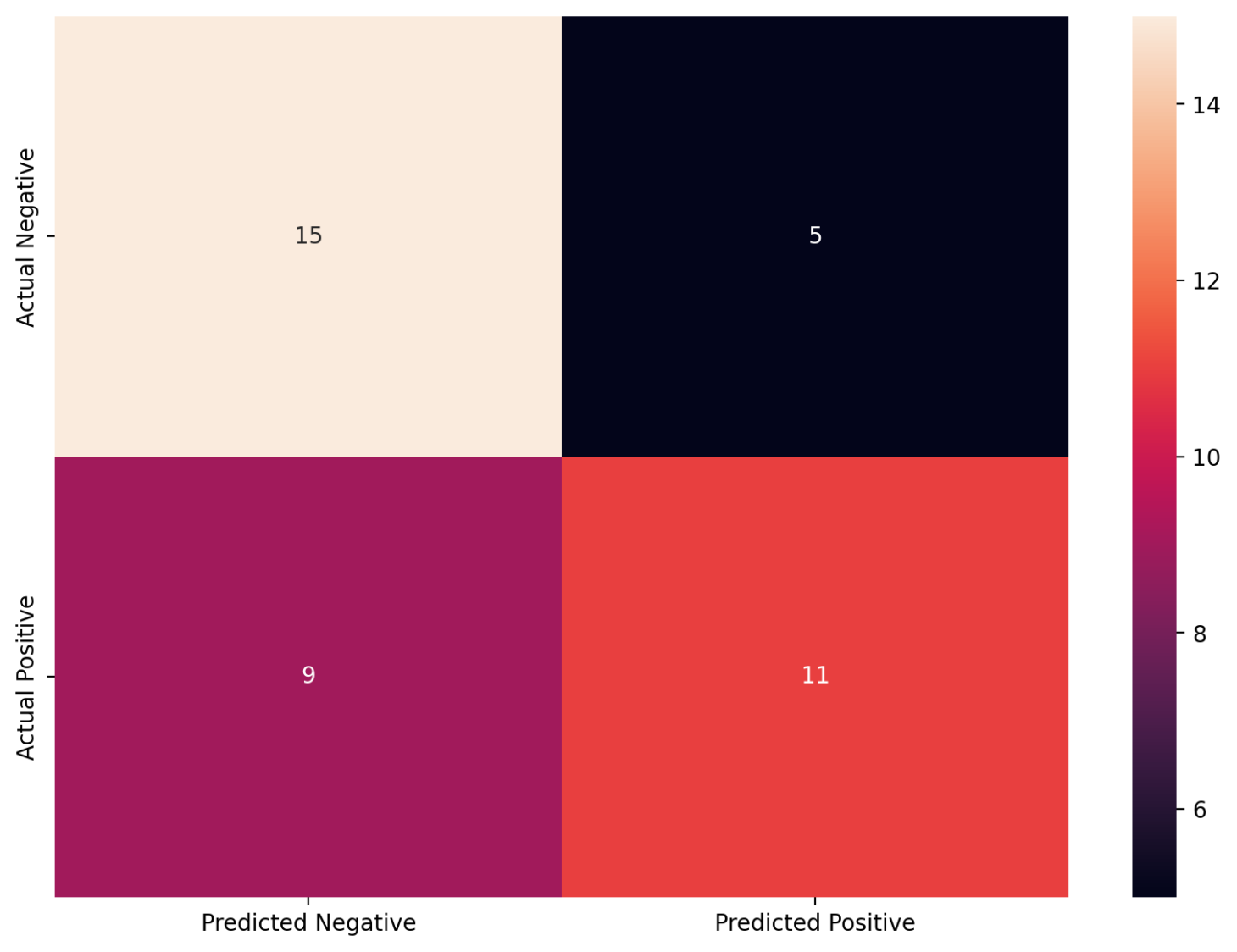
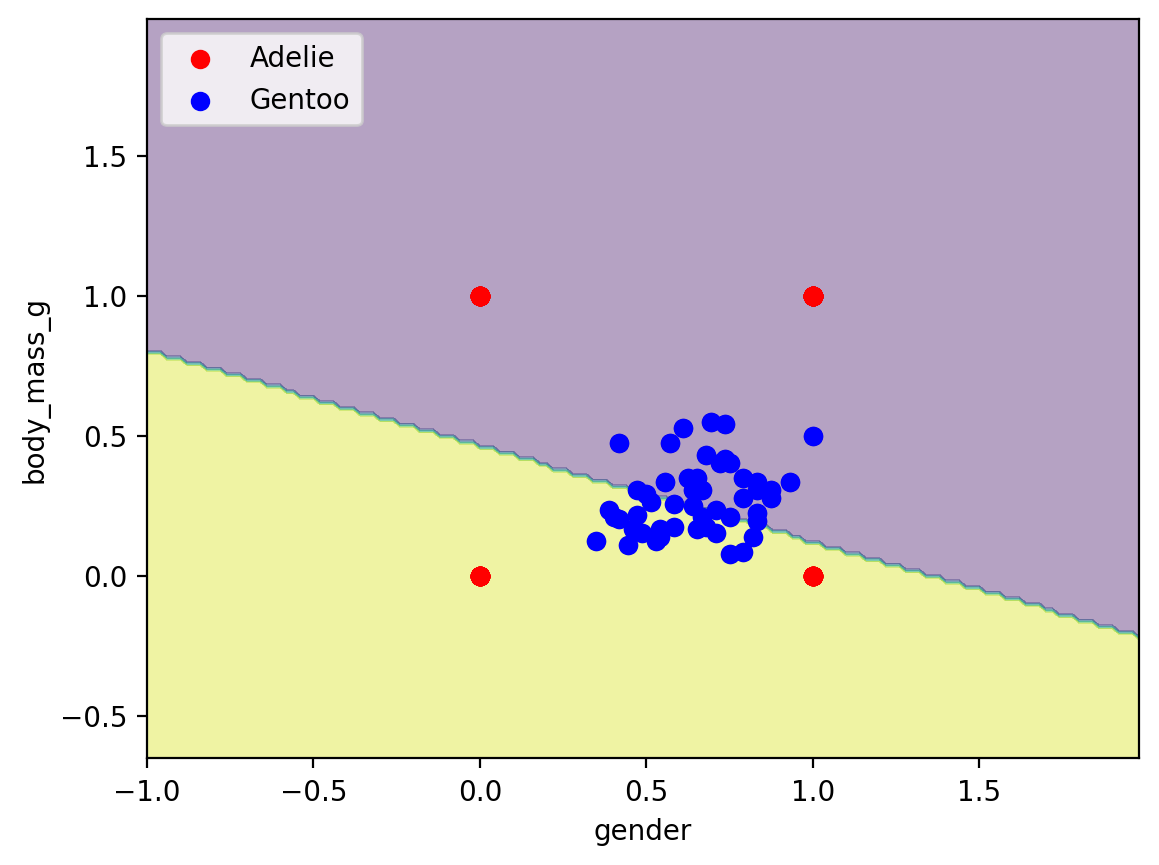
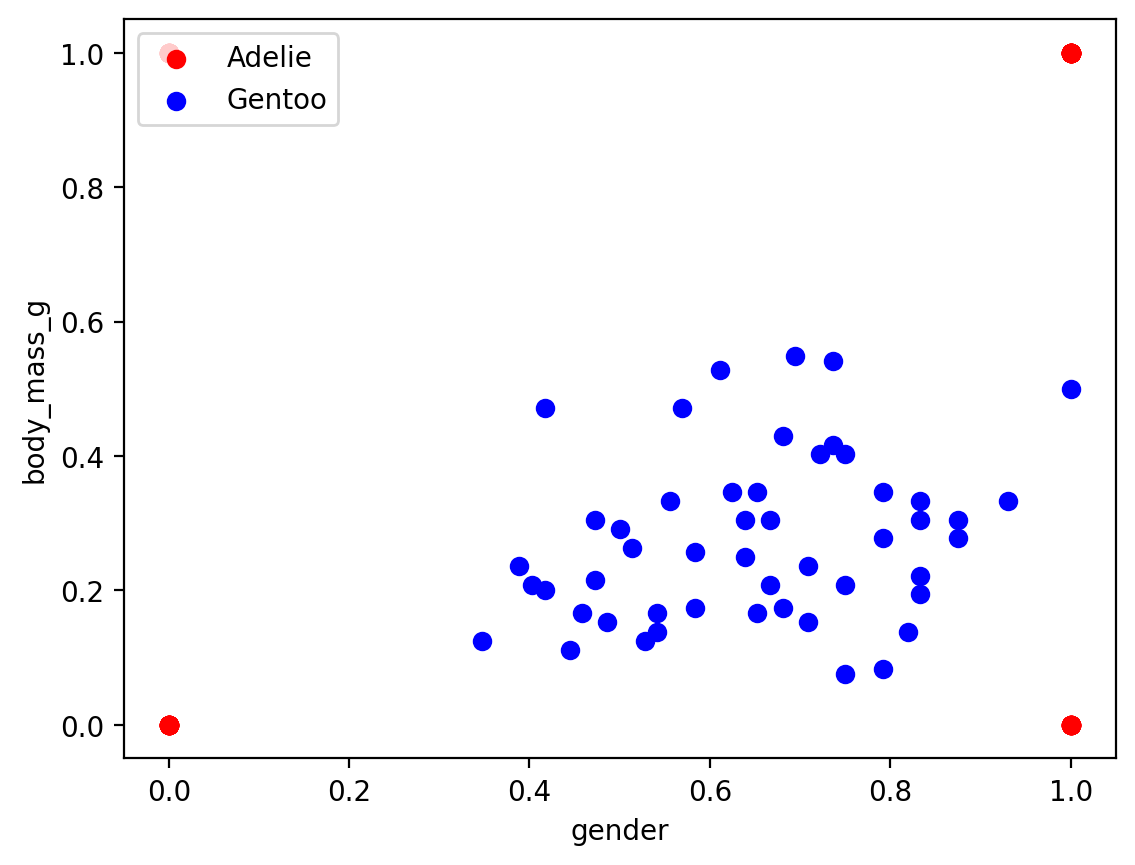
**Comment :** test accuracy = 0.5

flipper\_length\_mm , body\_mass\_g



**Comment:** test accuracy = 0.125

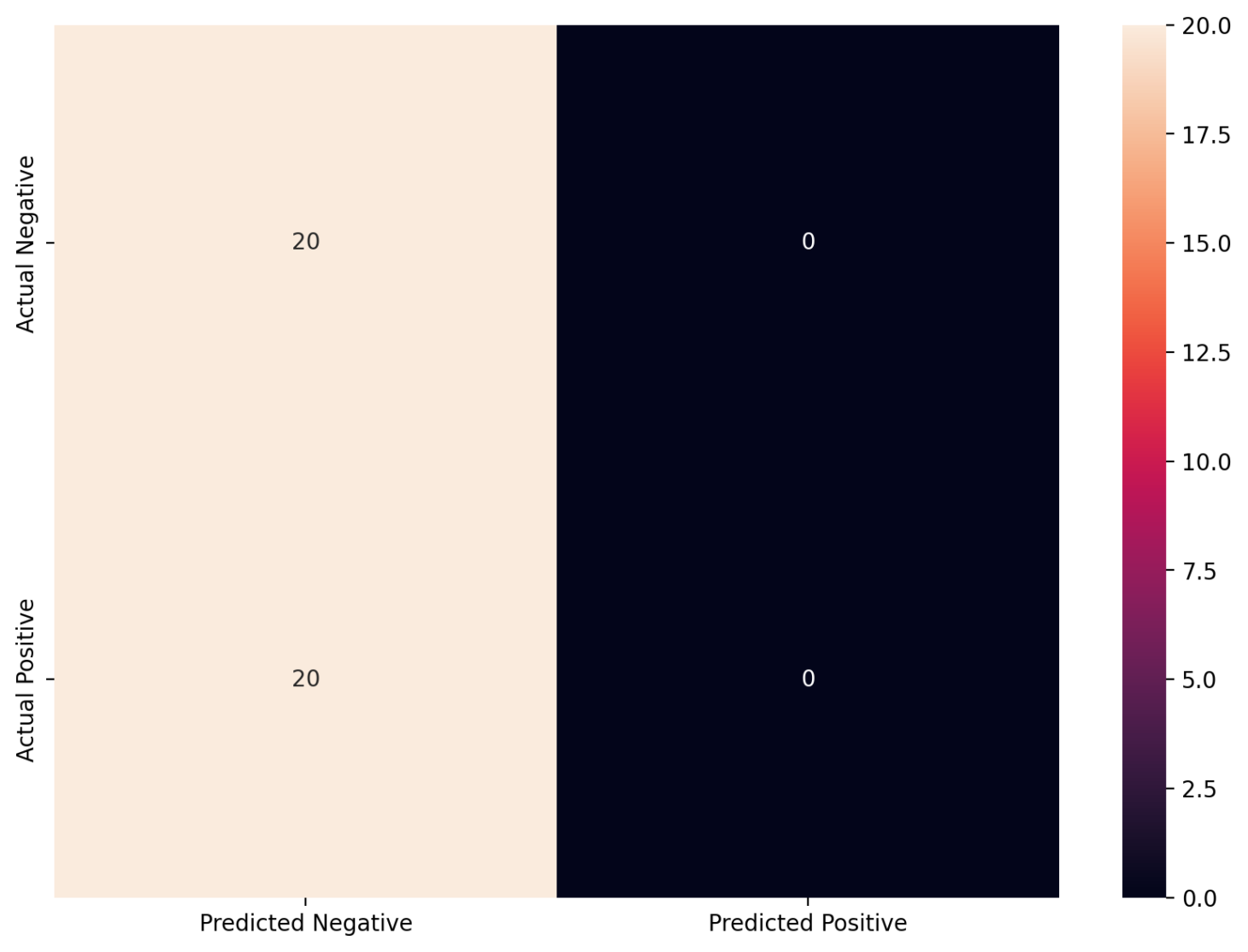
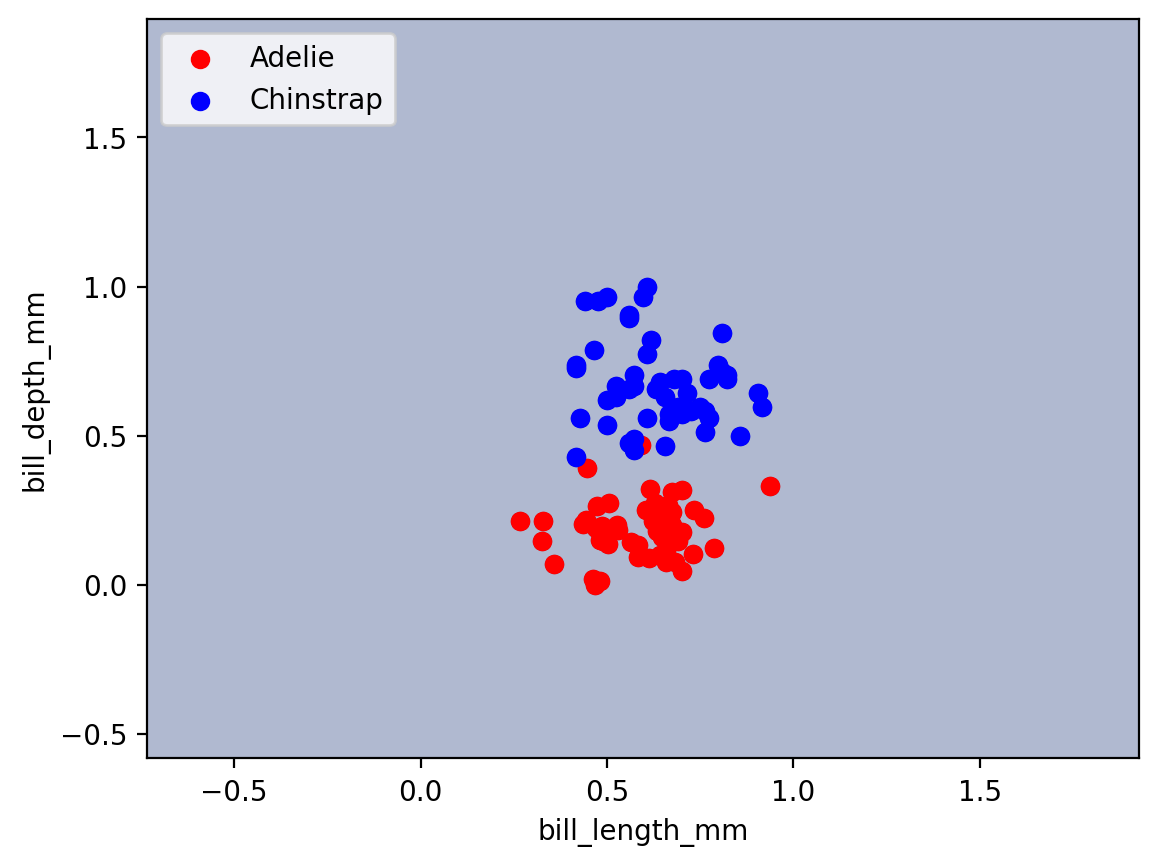
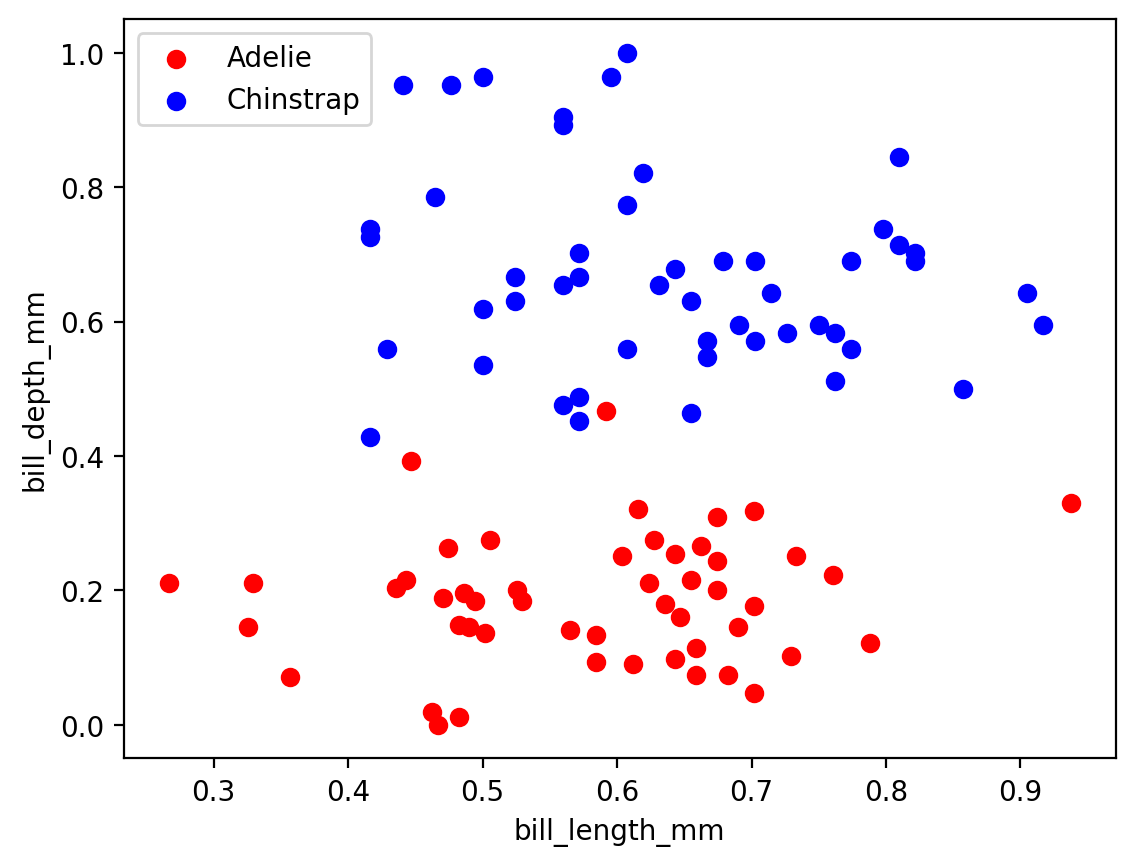
### gender , body\_mass\_g



**Comment:** test accuracy = 0.65

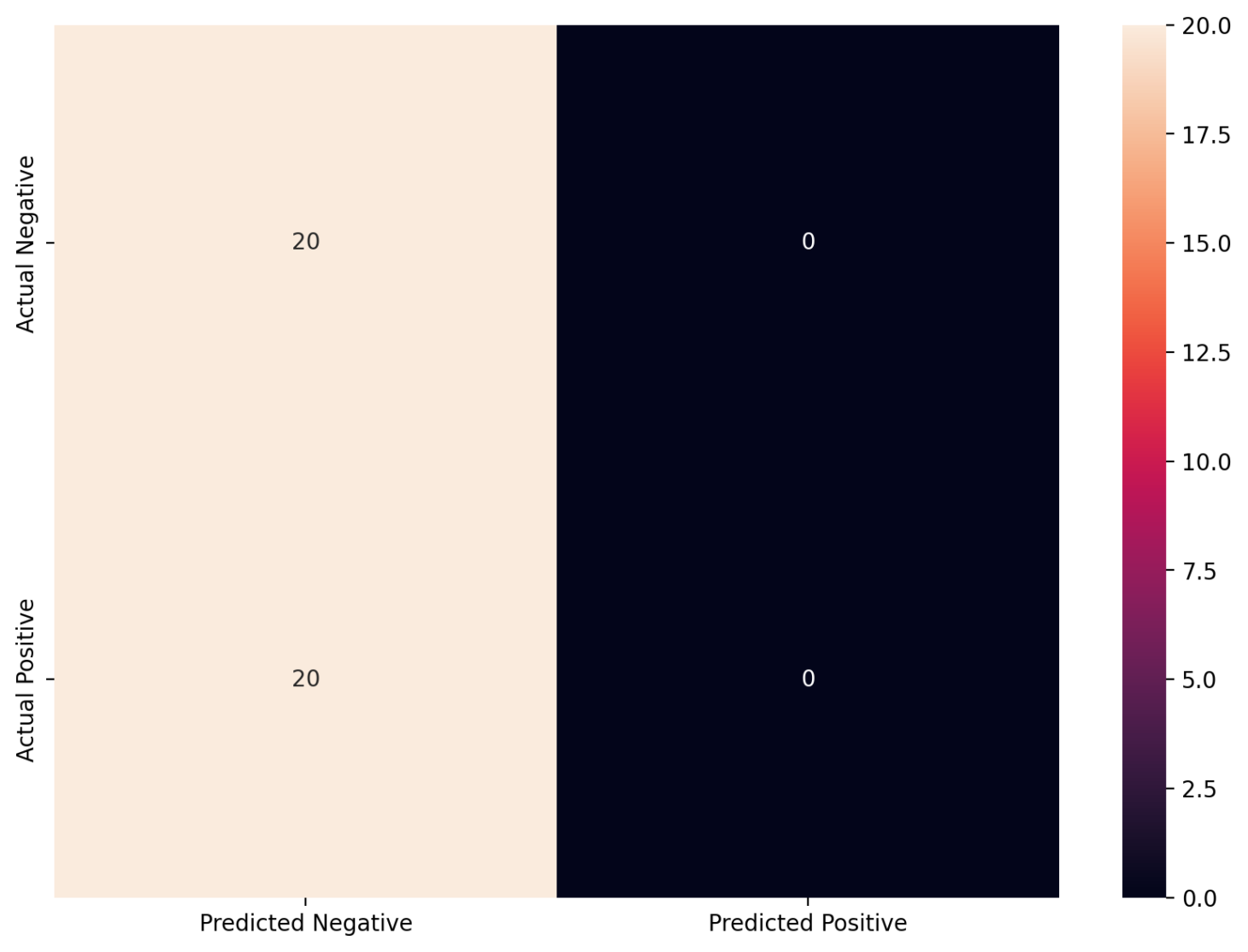
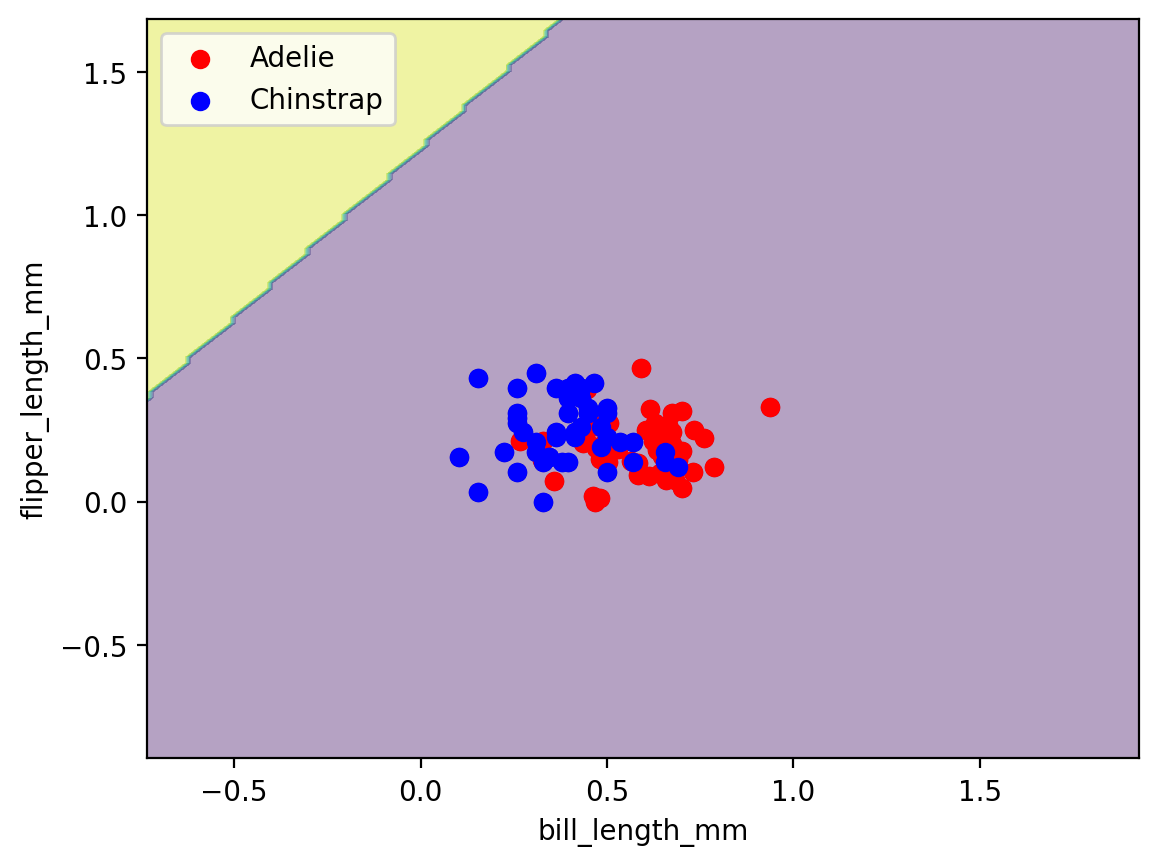
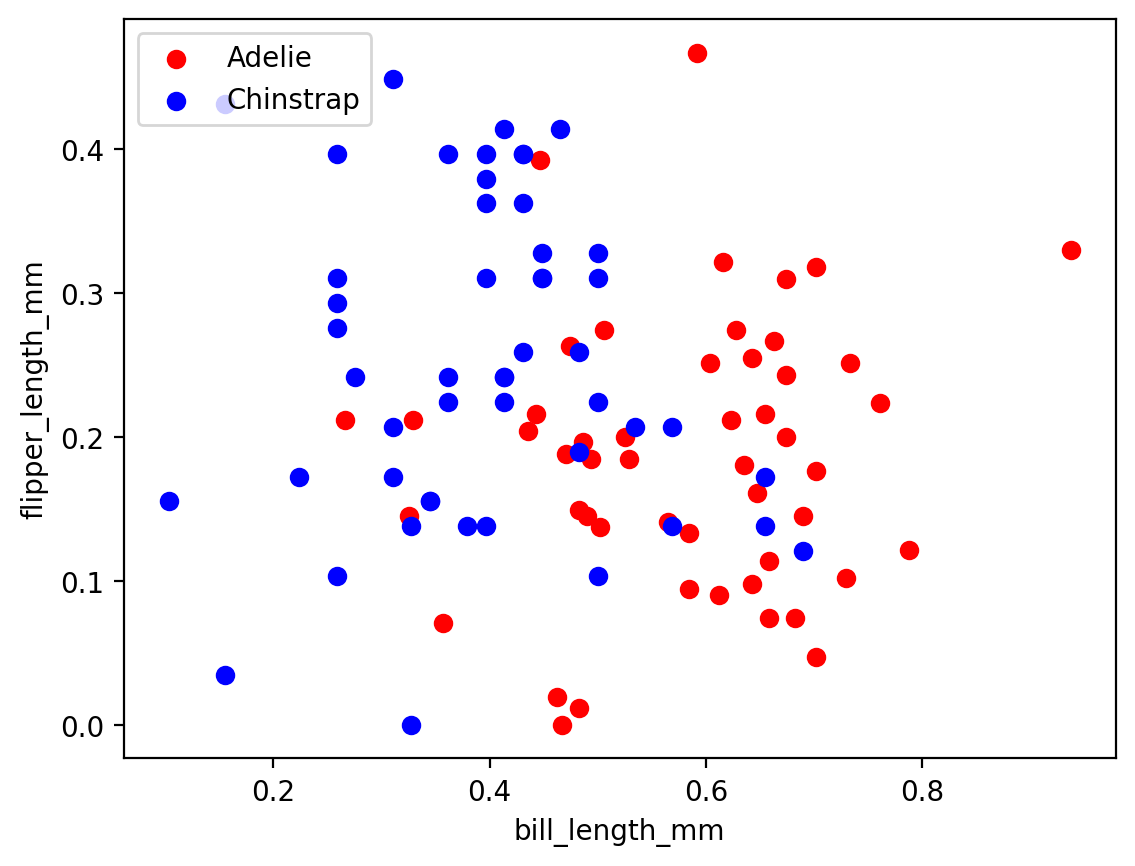
# Adelie and Chinstrap

### bill\_length\_mm , bill\_depth\_mm



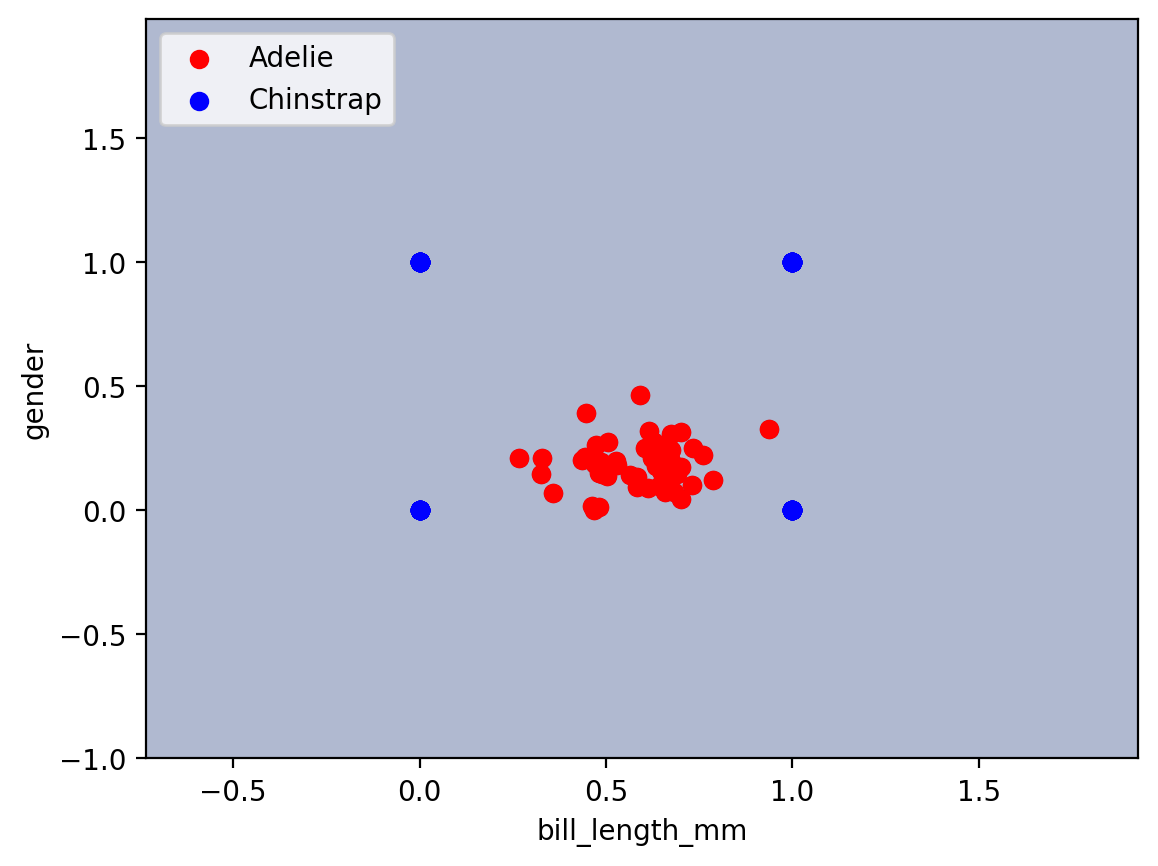
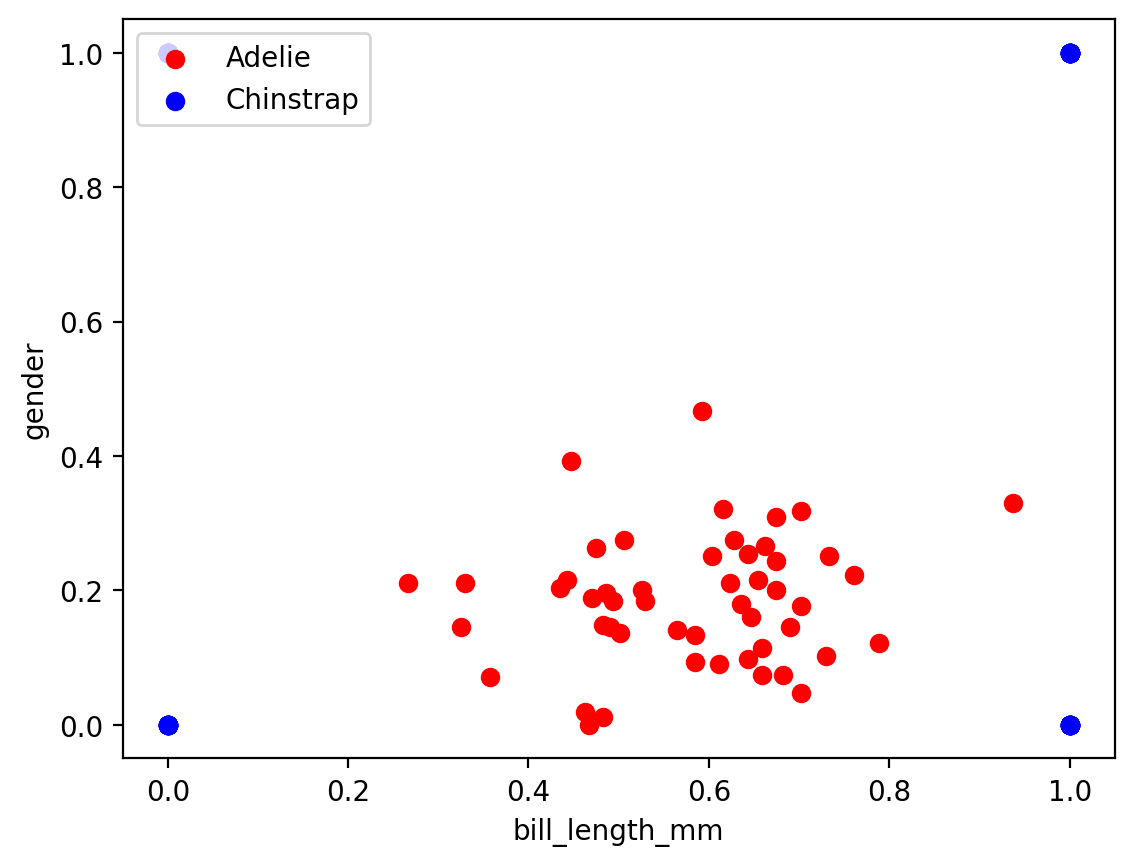
**Comment :** test accuracy = 0.5

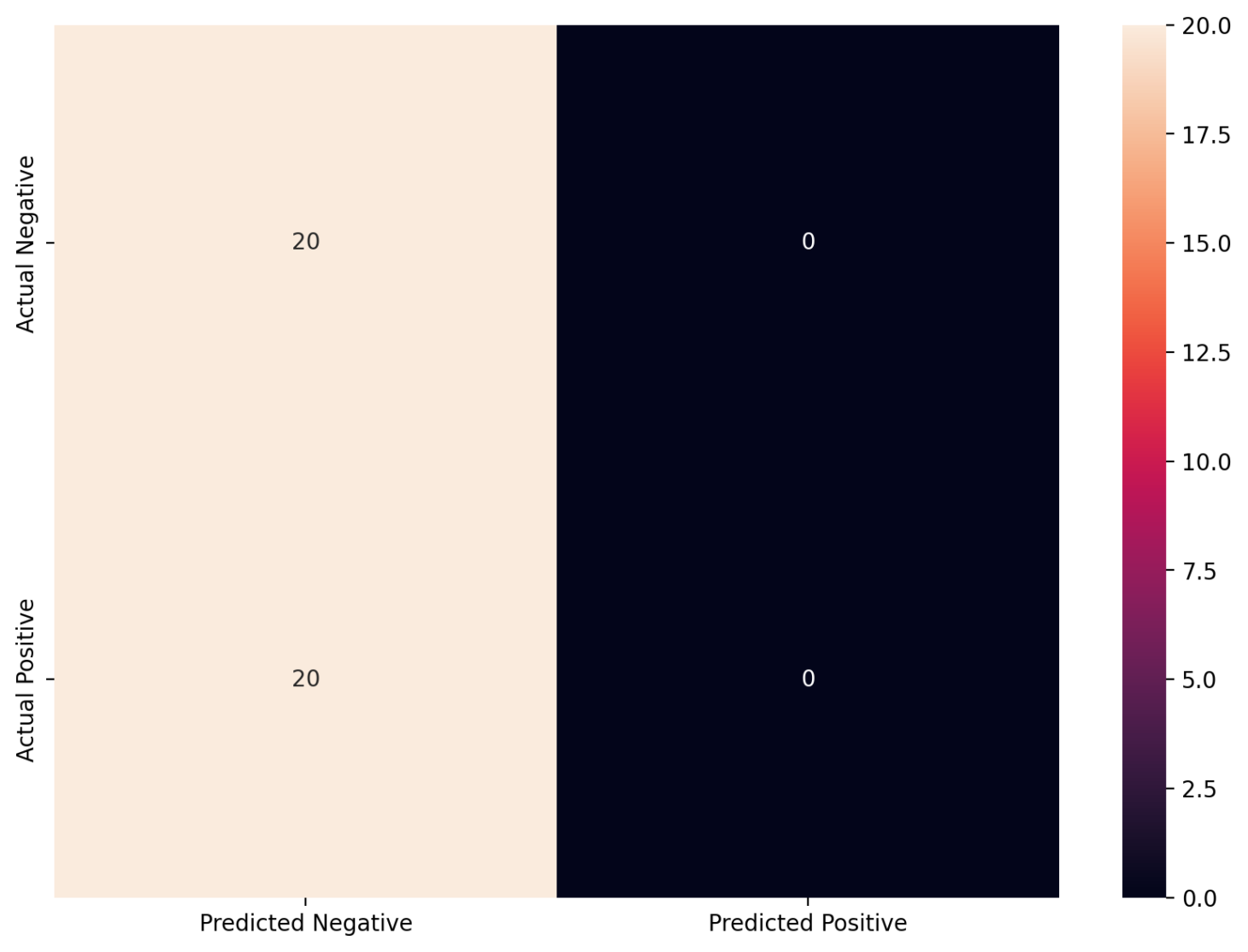
bill\_length\_mm, flipper\_length\_mm



**Comment:** test accuracy = 0.5

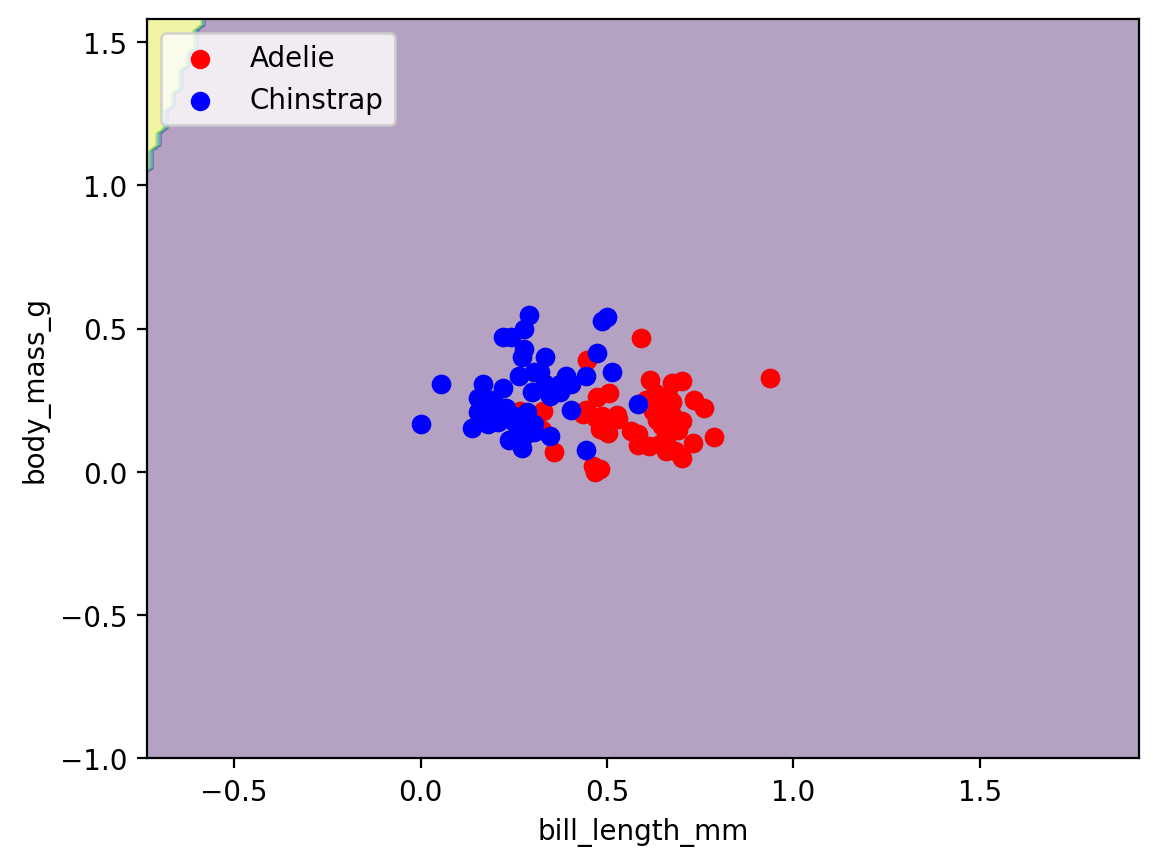
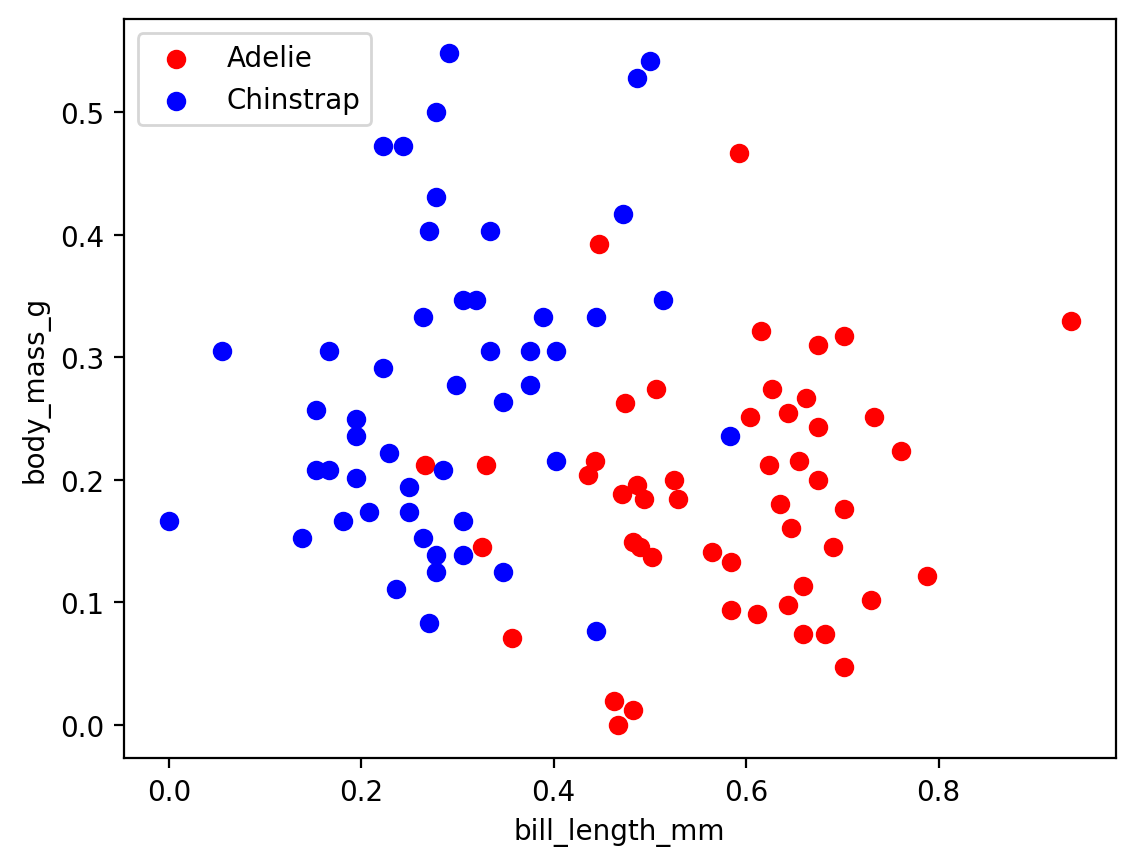
### bill\_length\_mm , gender

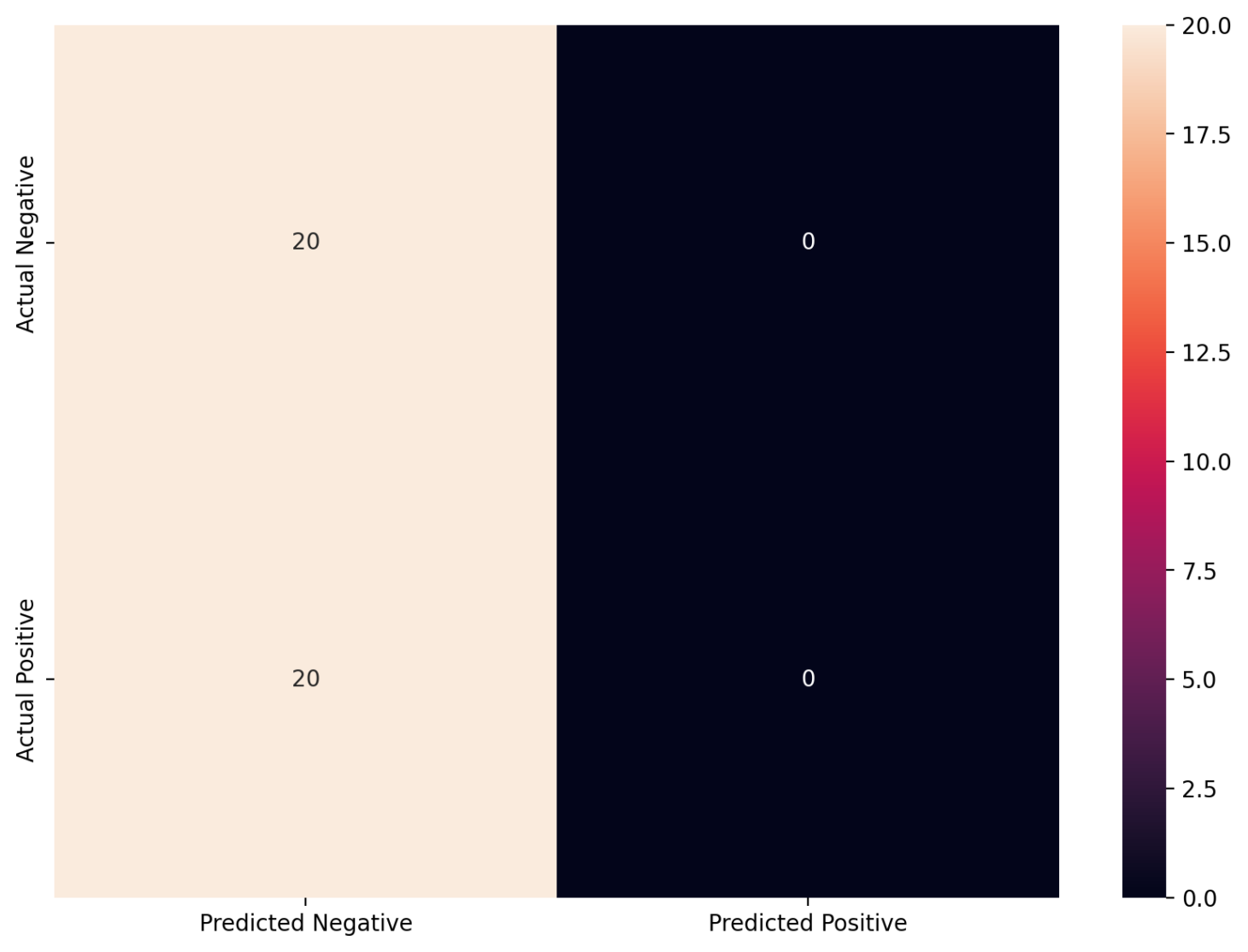




**Comment :** test accuracy = 0.5

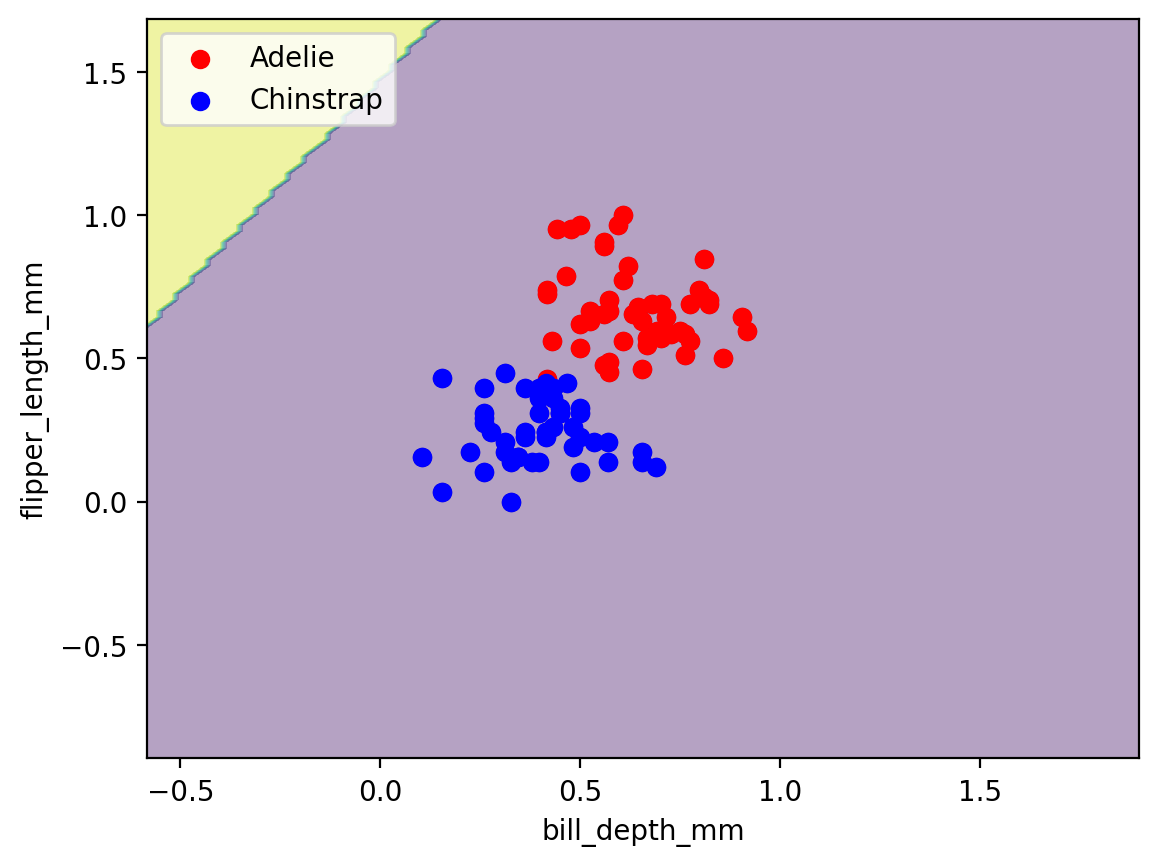
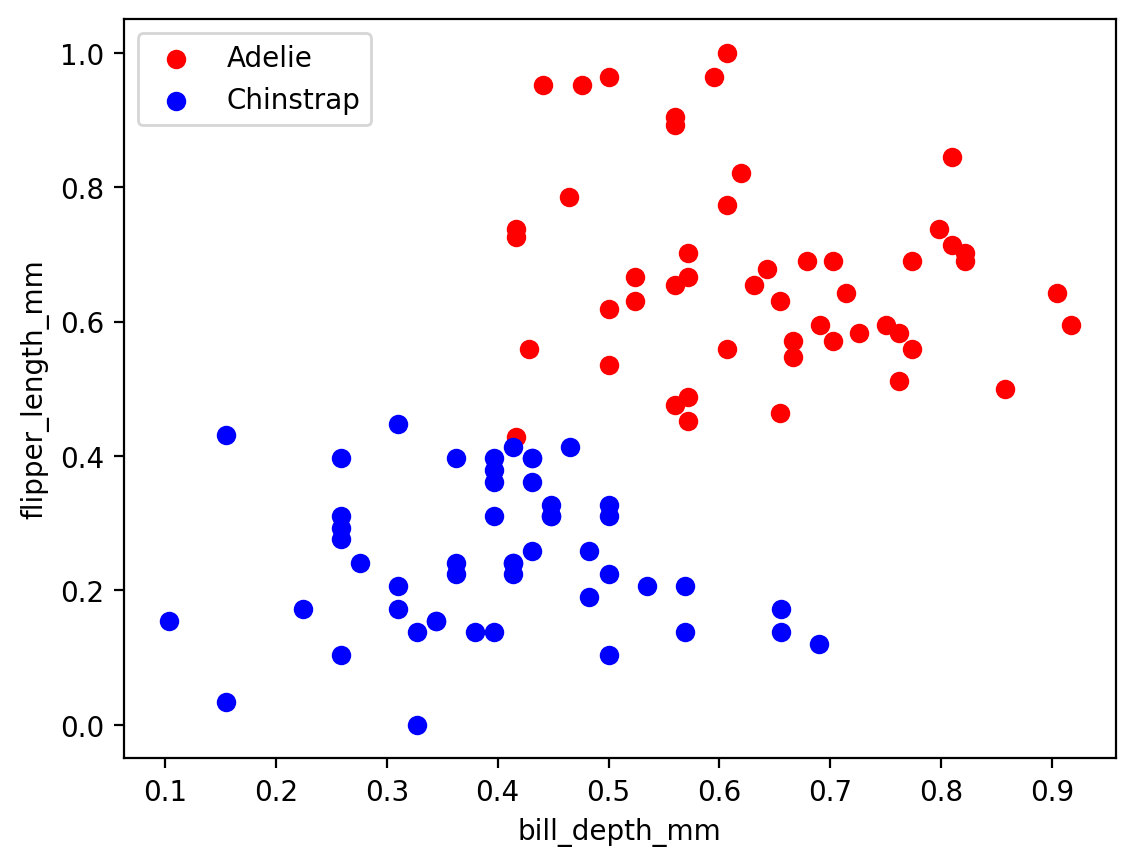
bill\_length\_mm , body\_mass\_g

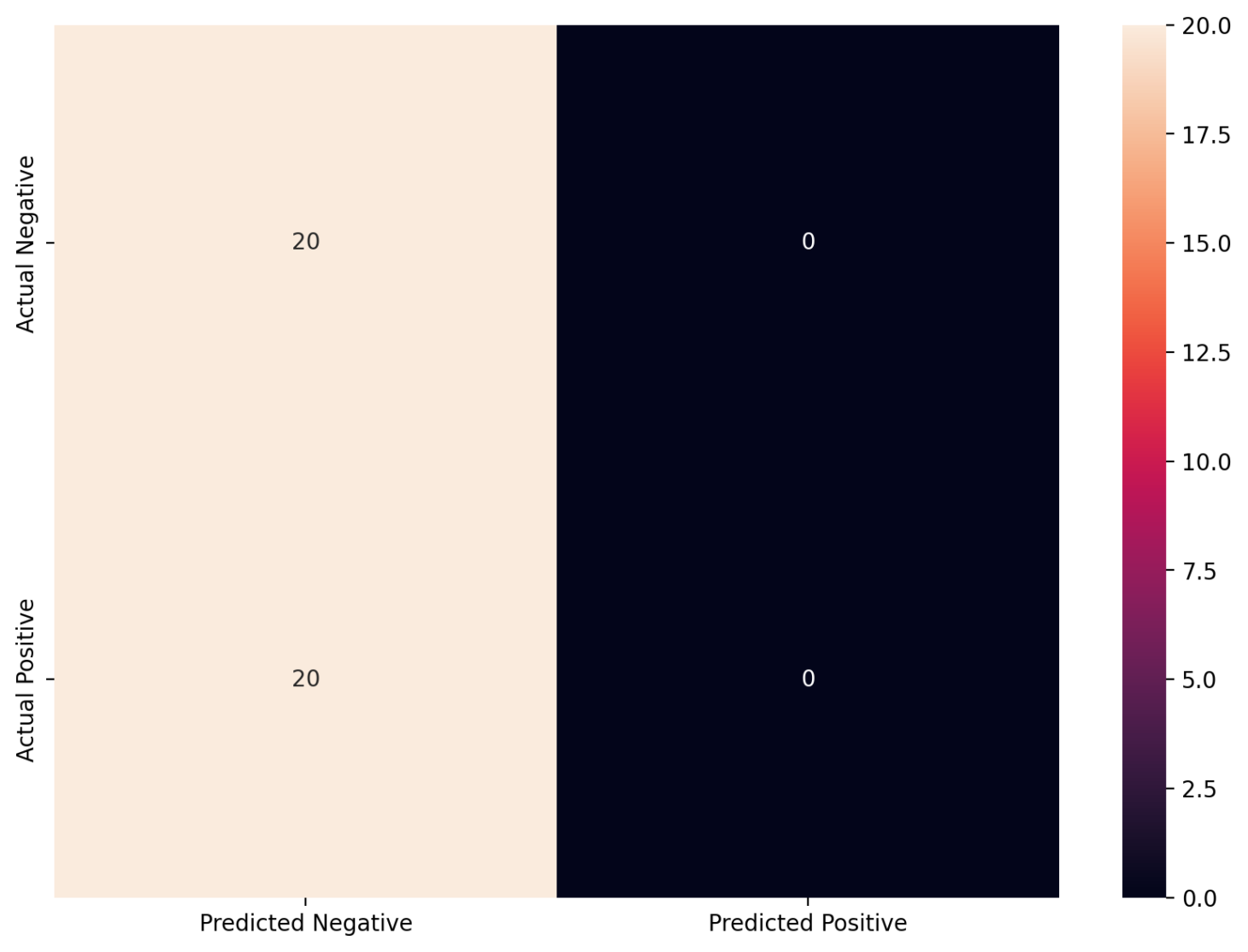




**Comment:** test accuracy = 0.5

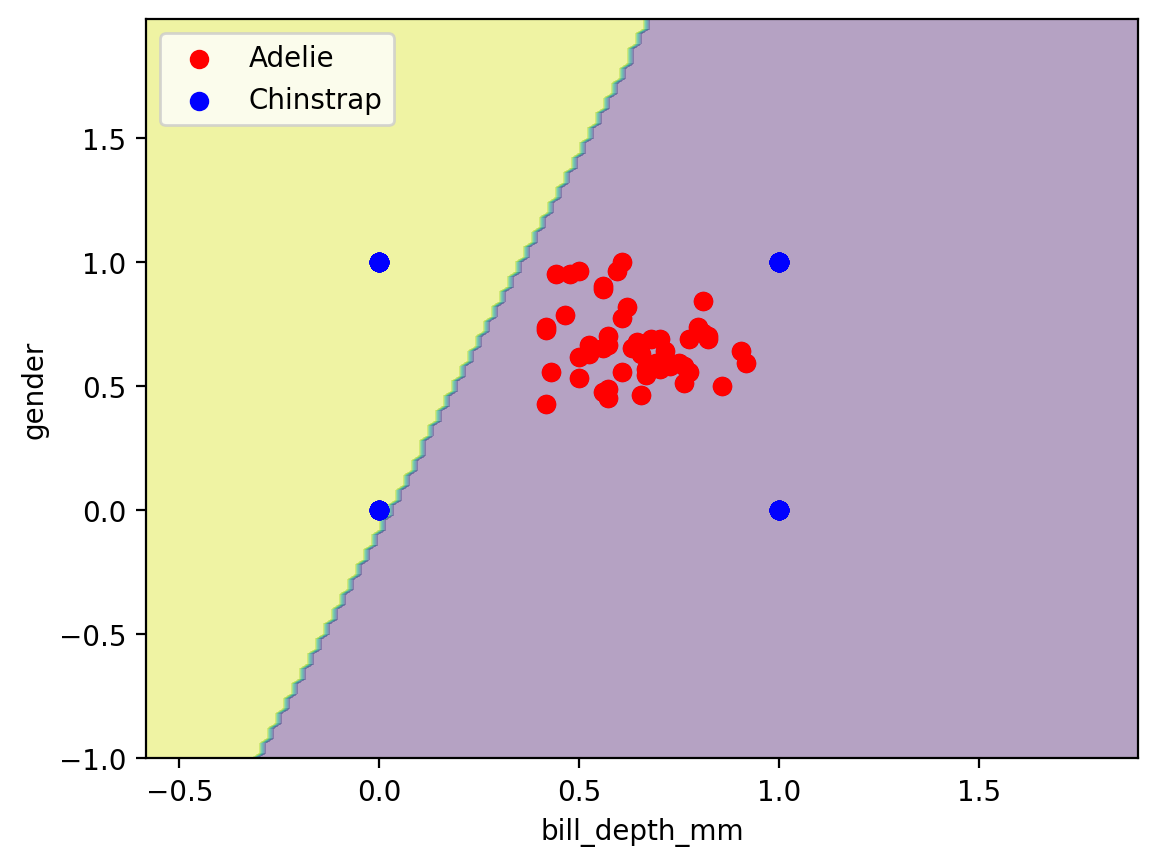
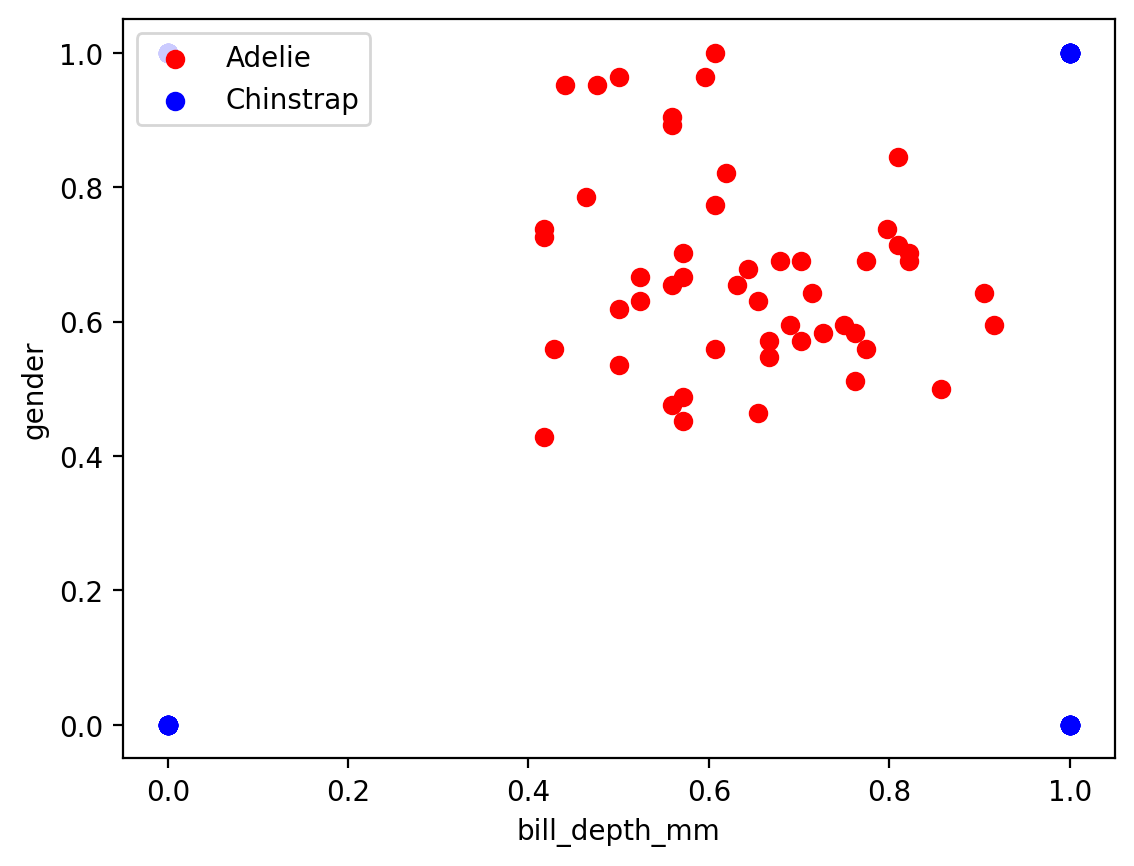
bill\_depth\_mm , flipper\_length\_mm

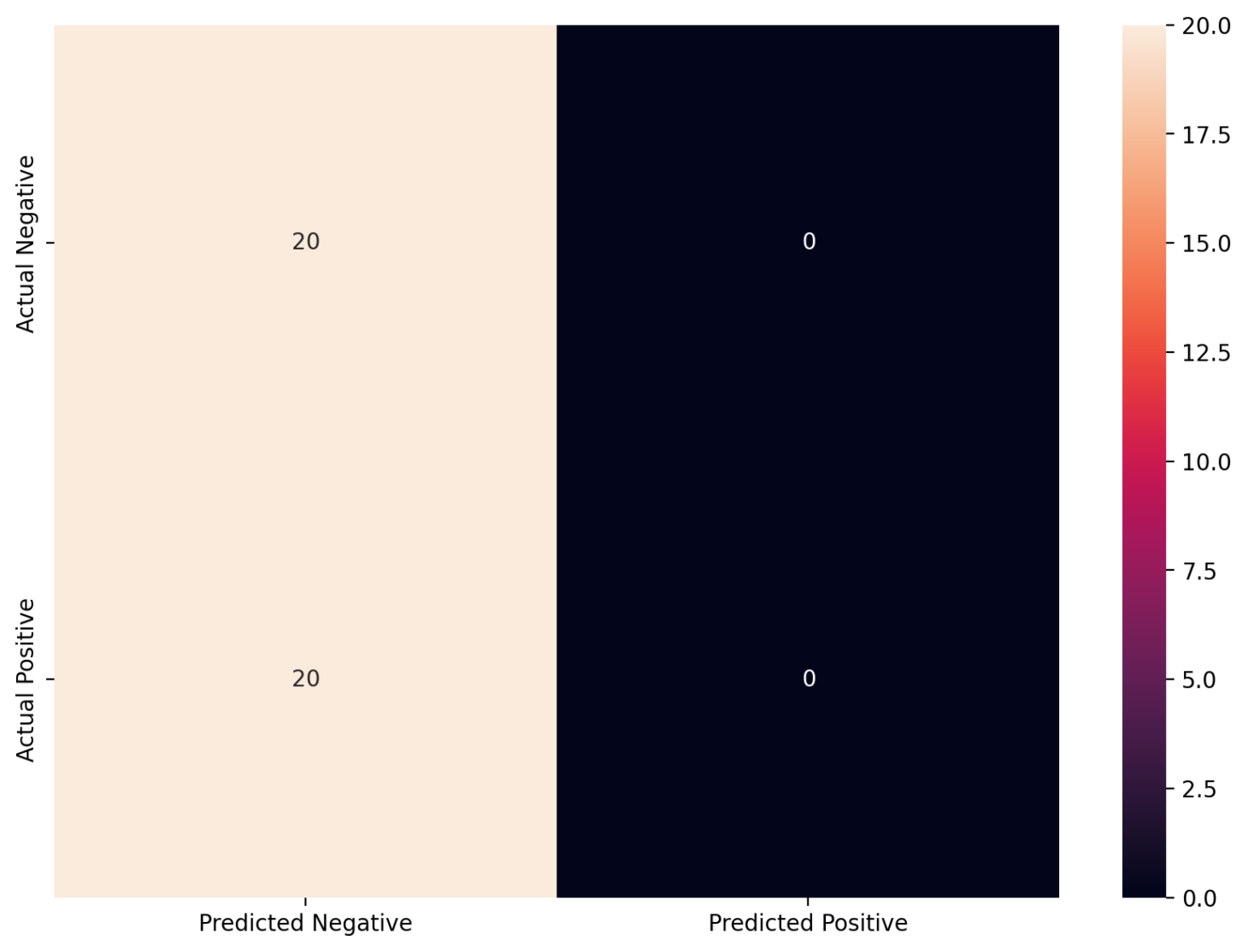




**Comment:** test accuracy = 0.5

bill\_depth\_mm , gender

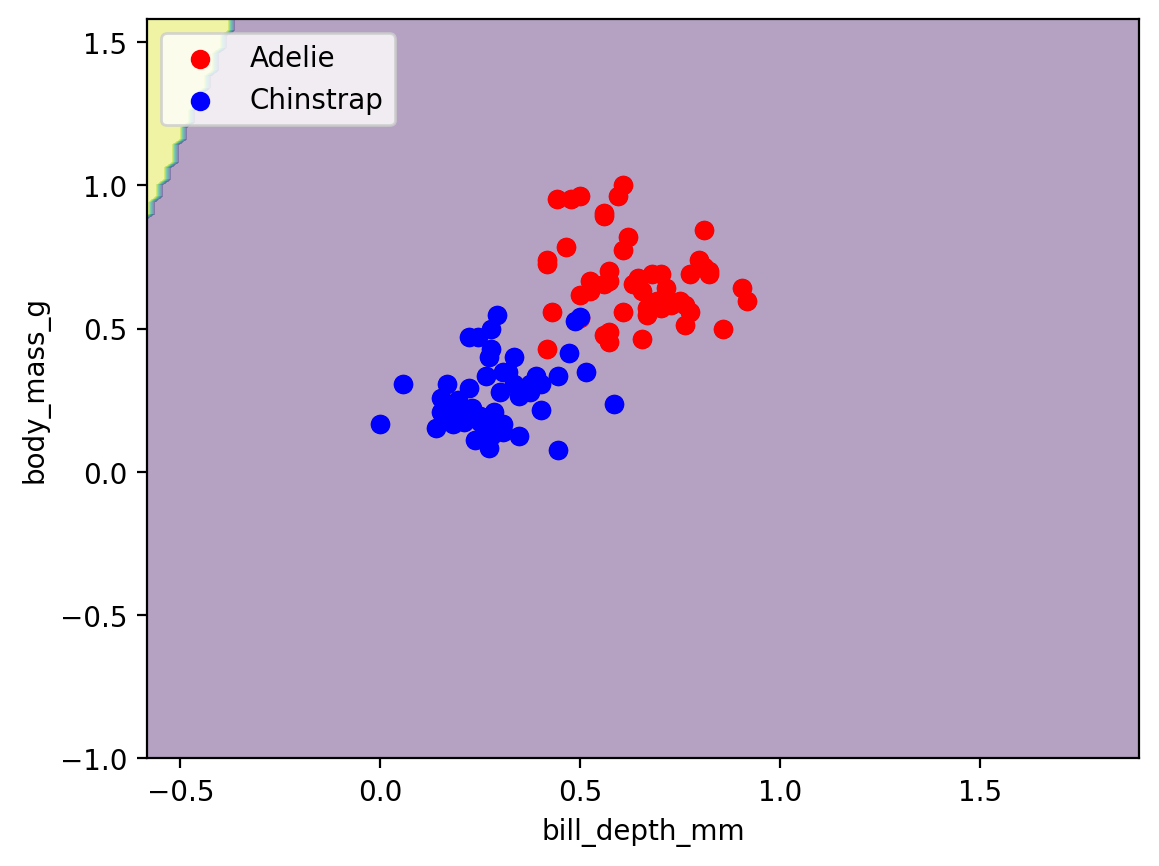
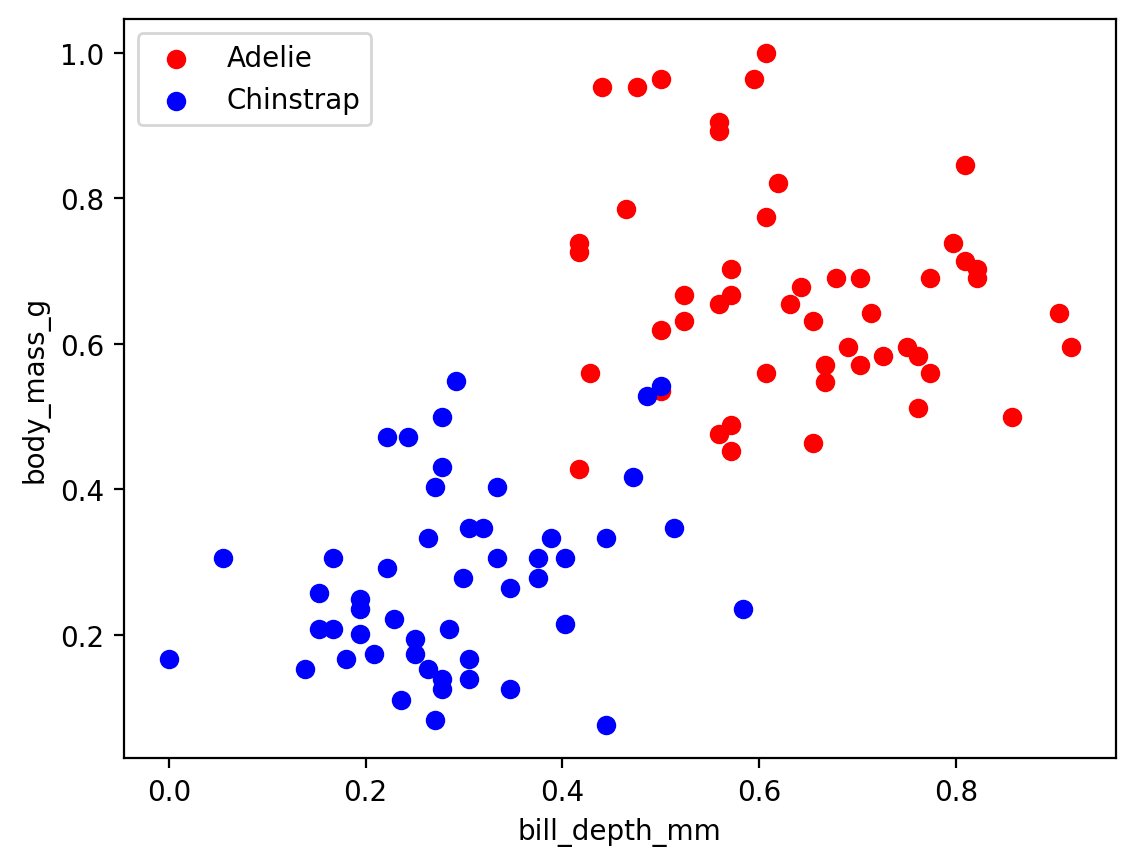


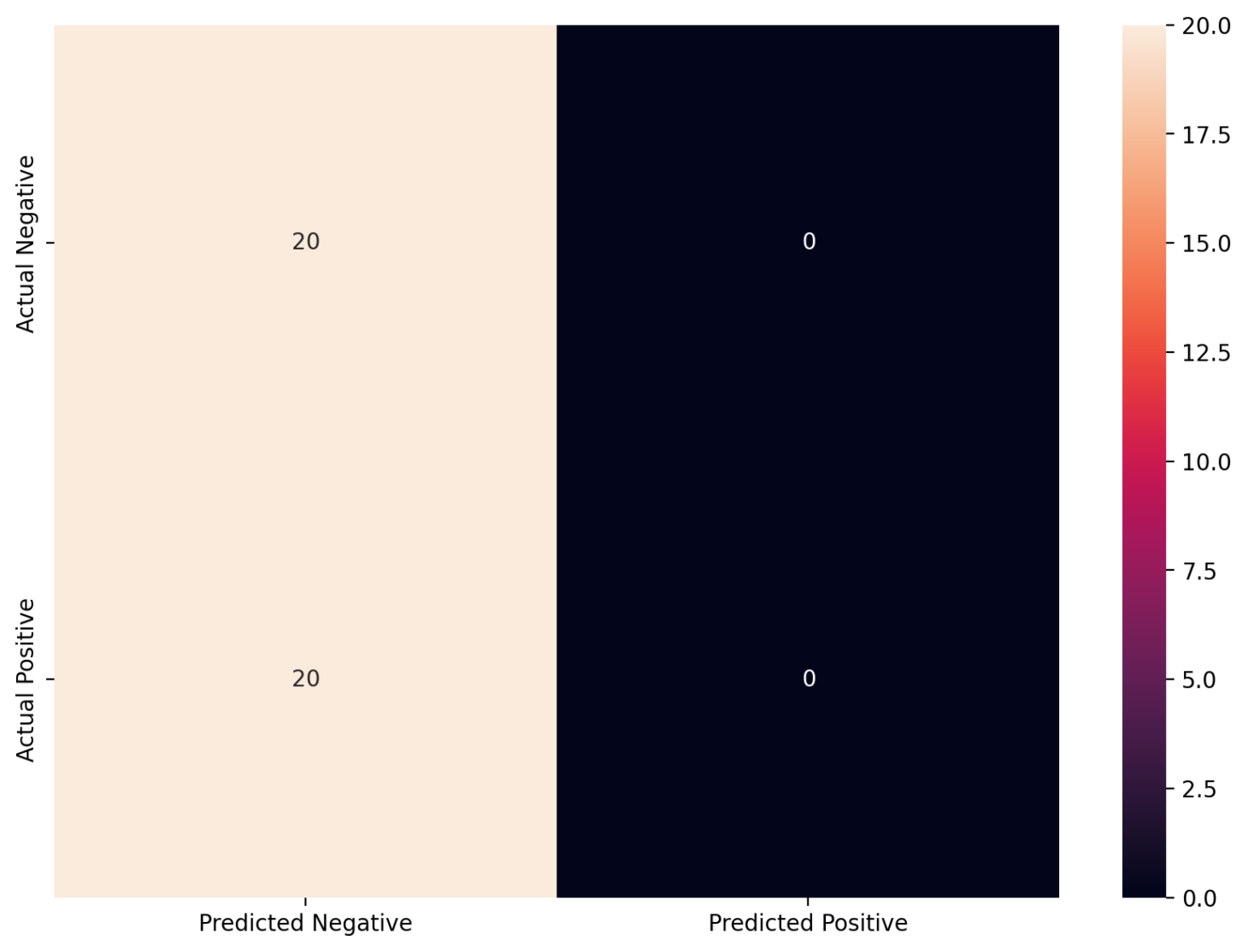


**Comment:** test accuracy = 0.5

### 

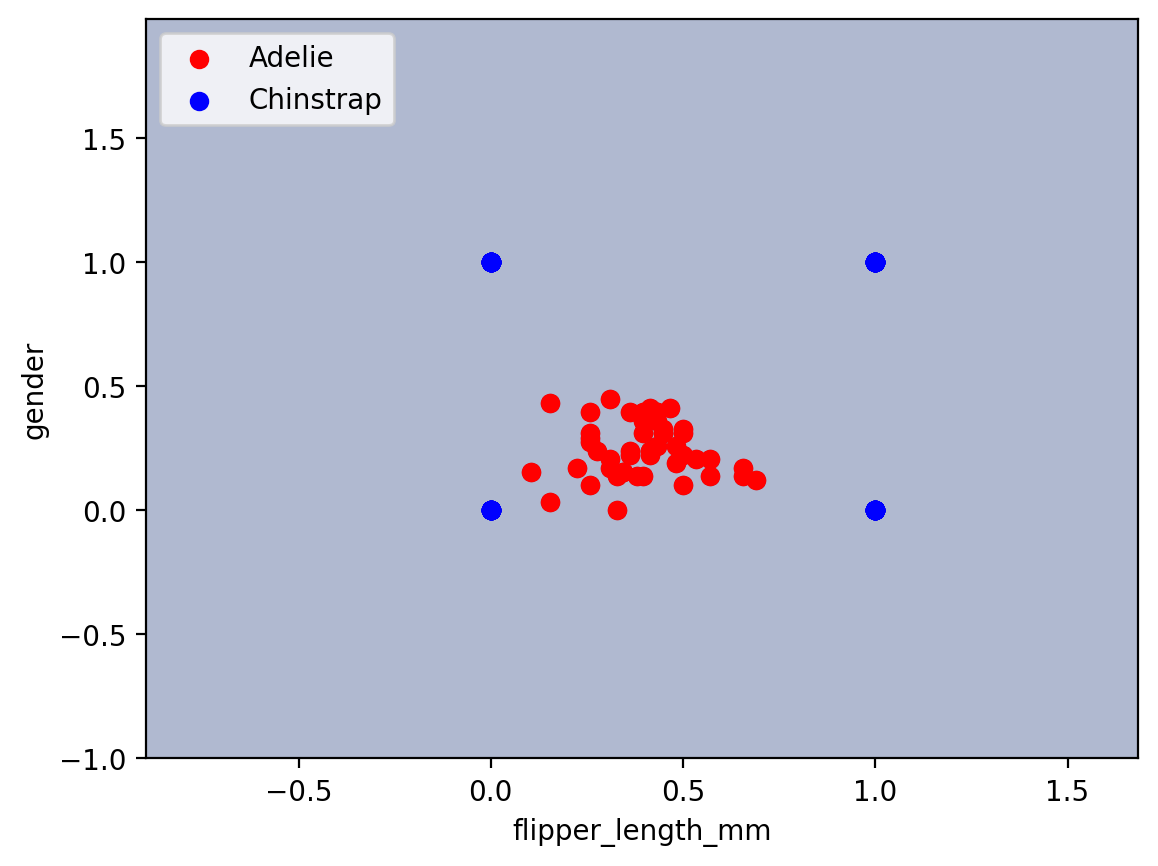
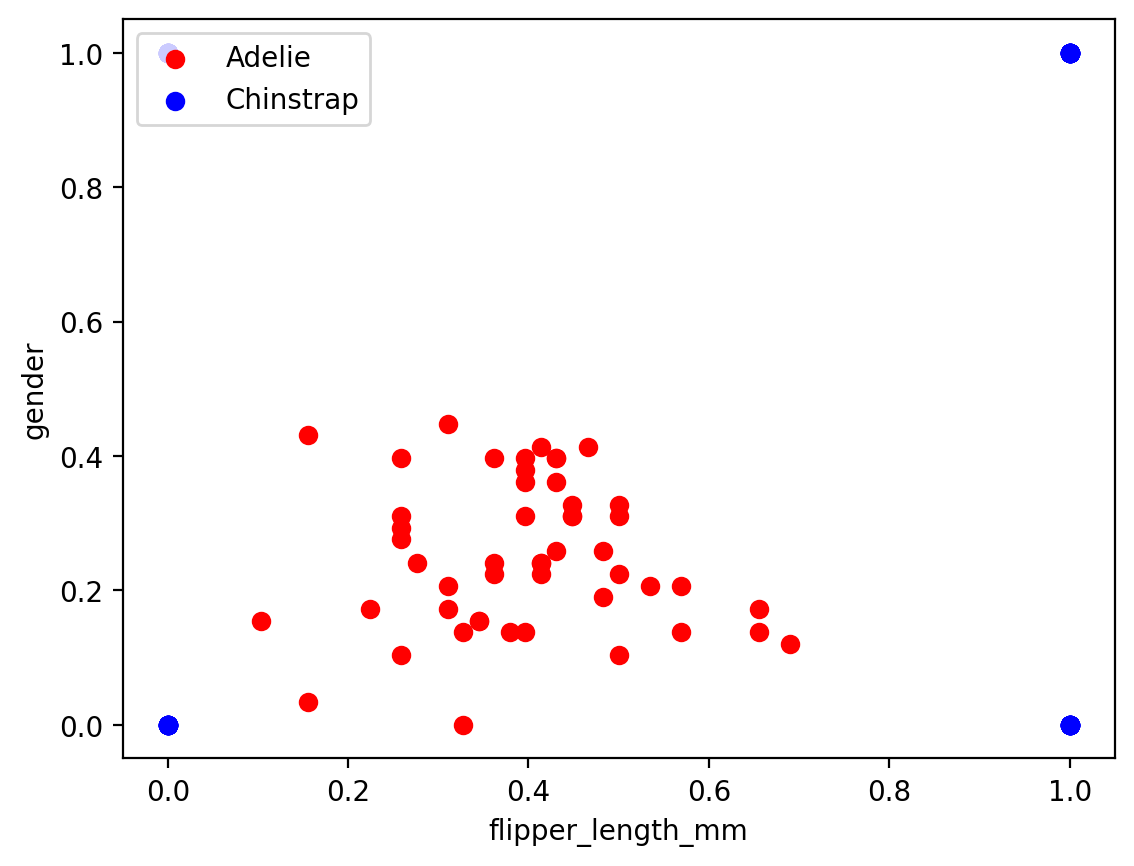
### bill\_depth\_mm , body\_mass\_g

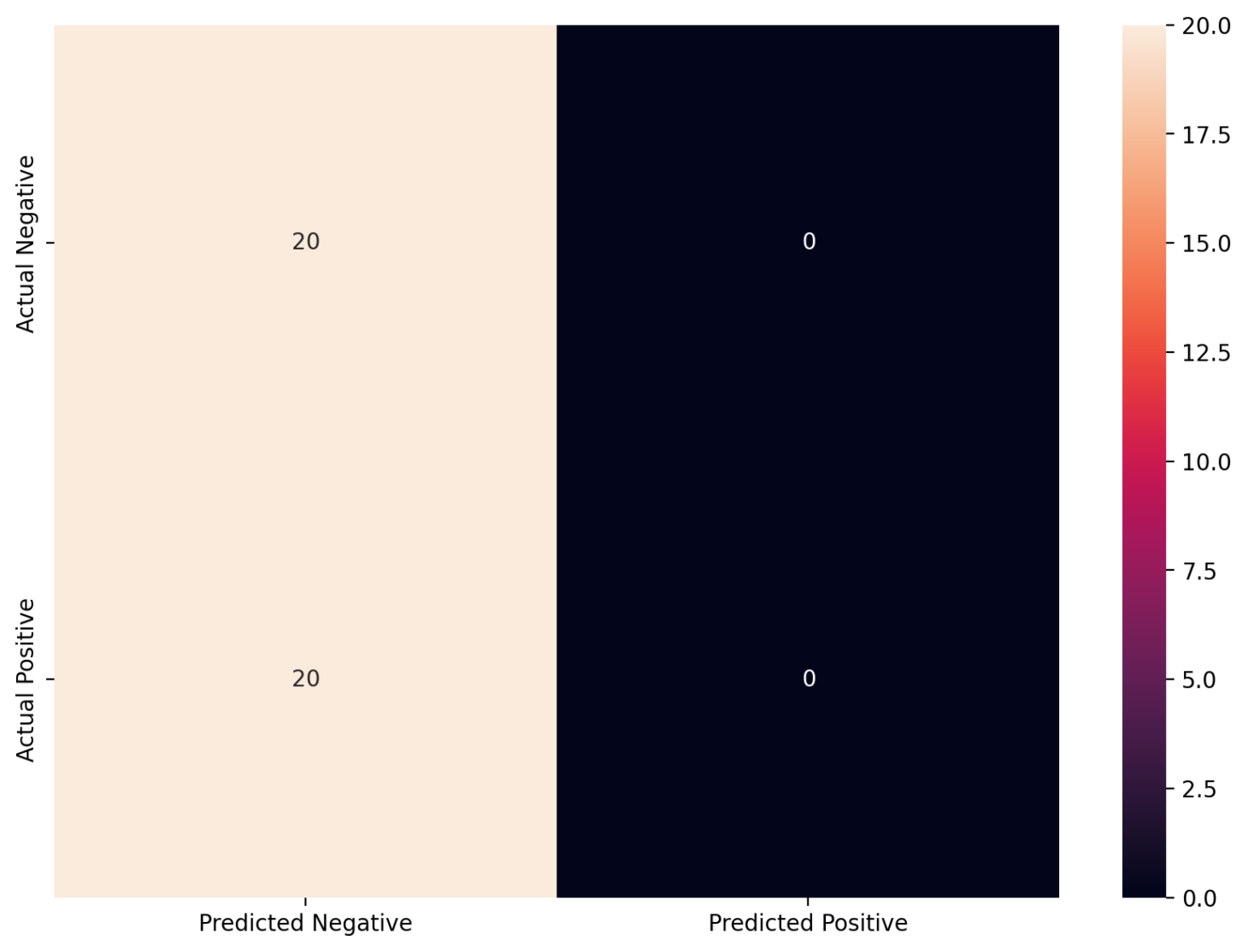




**Comment:** test accuracy = 0.5

### flipper\_length\_mm , gender

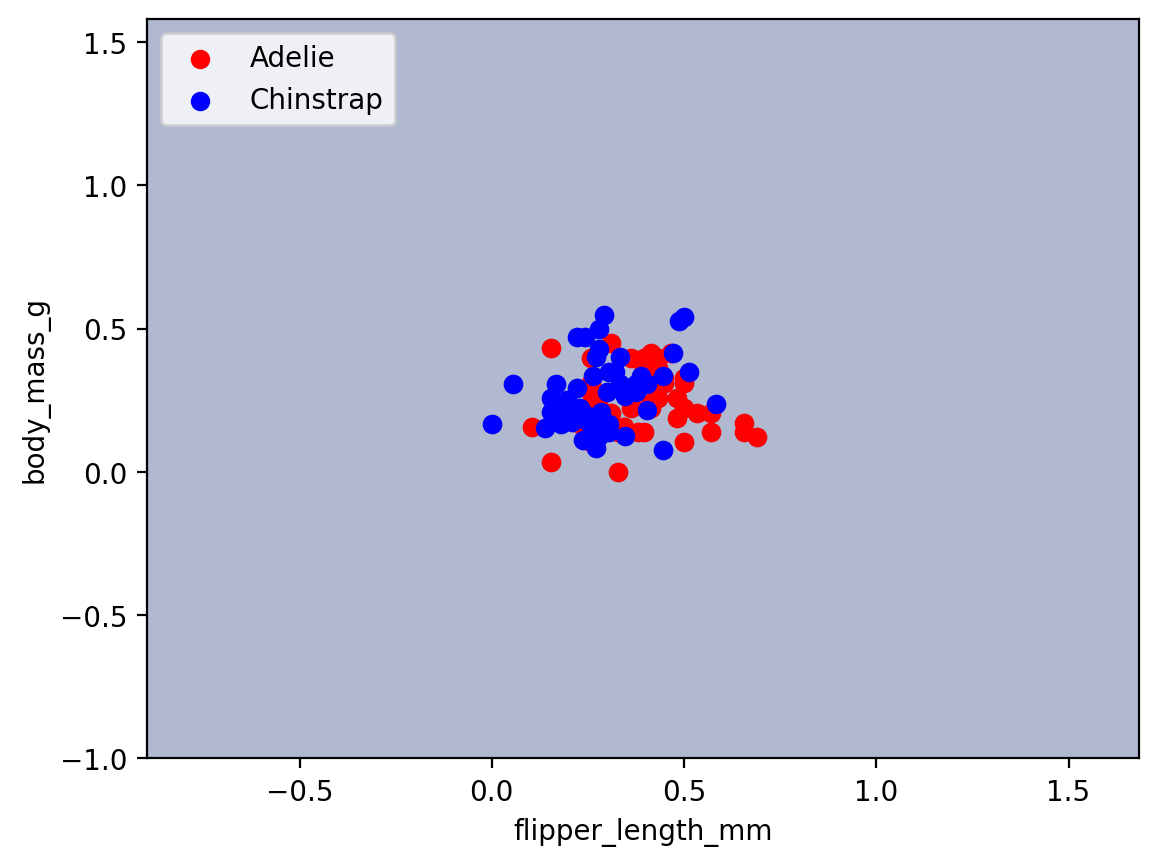
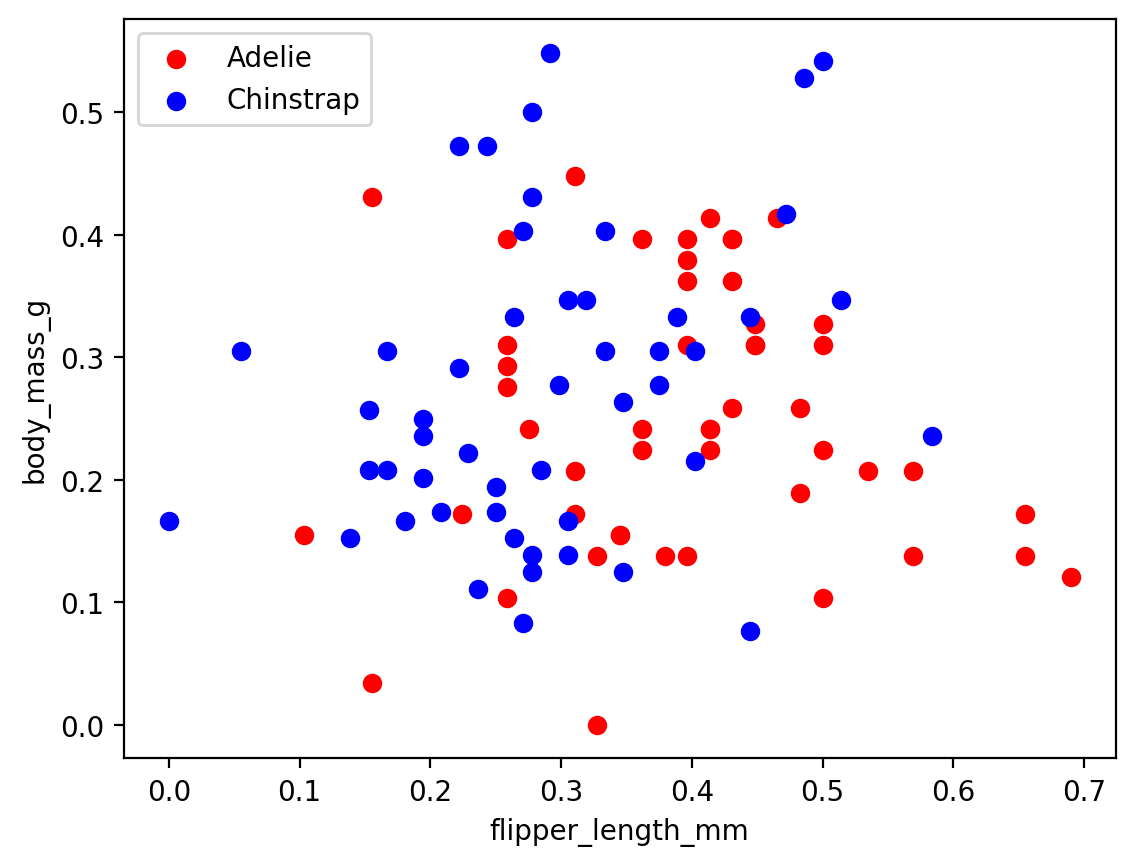


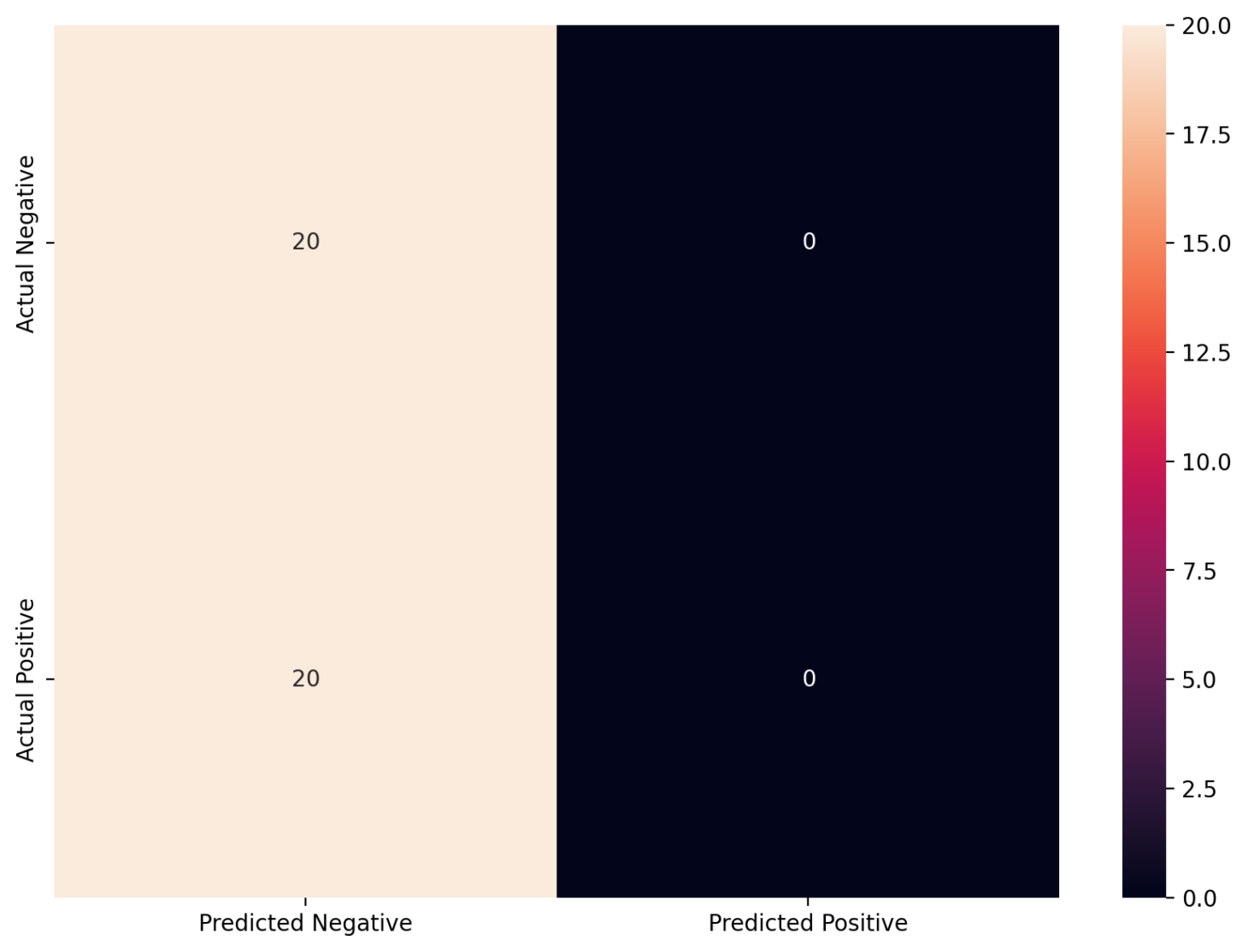


**Comment:**test accuracy = 0.5

### 

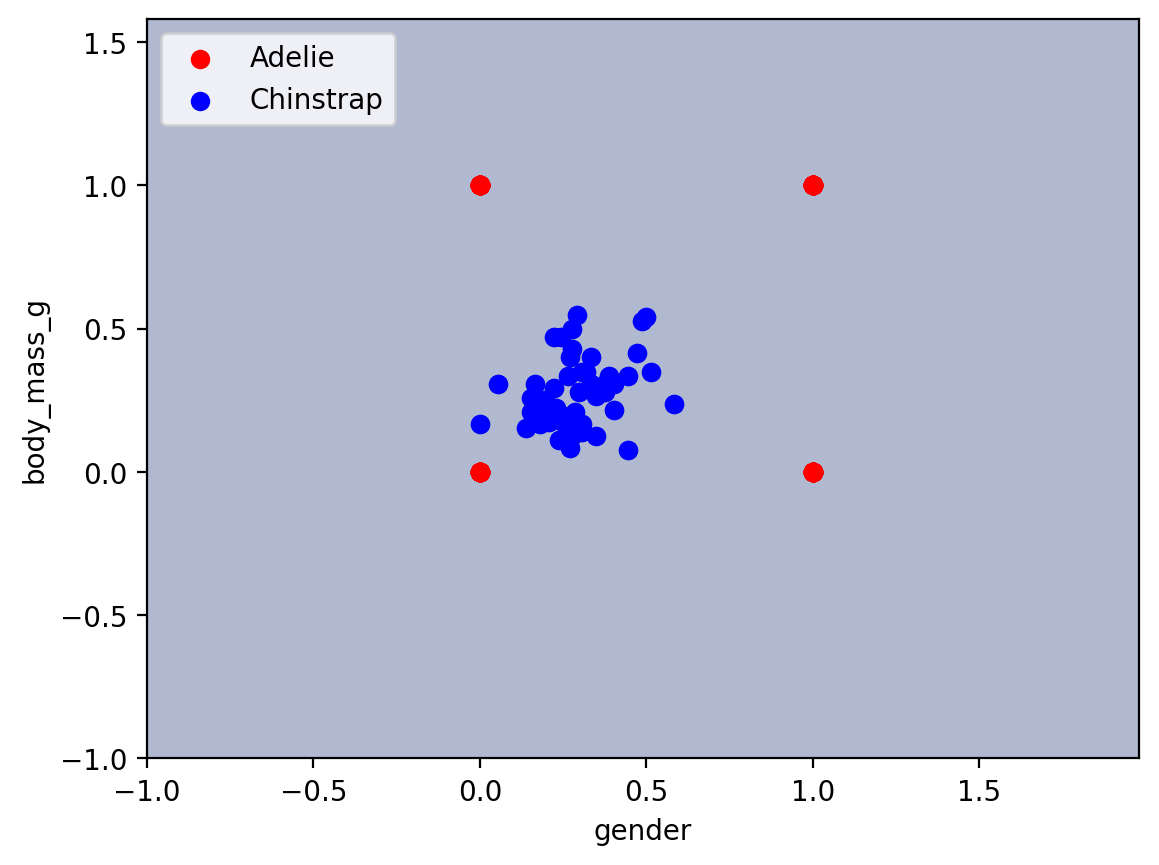
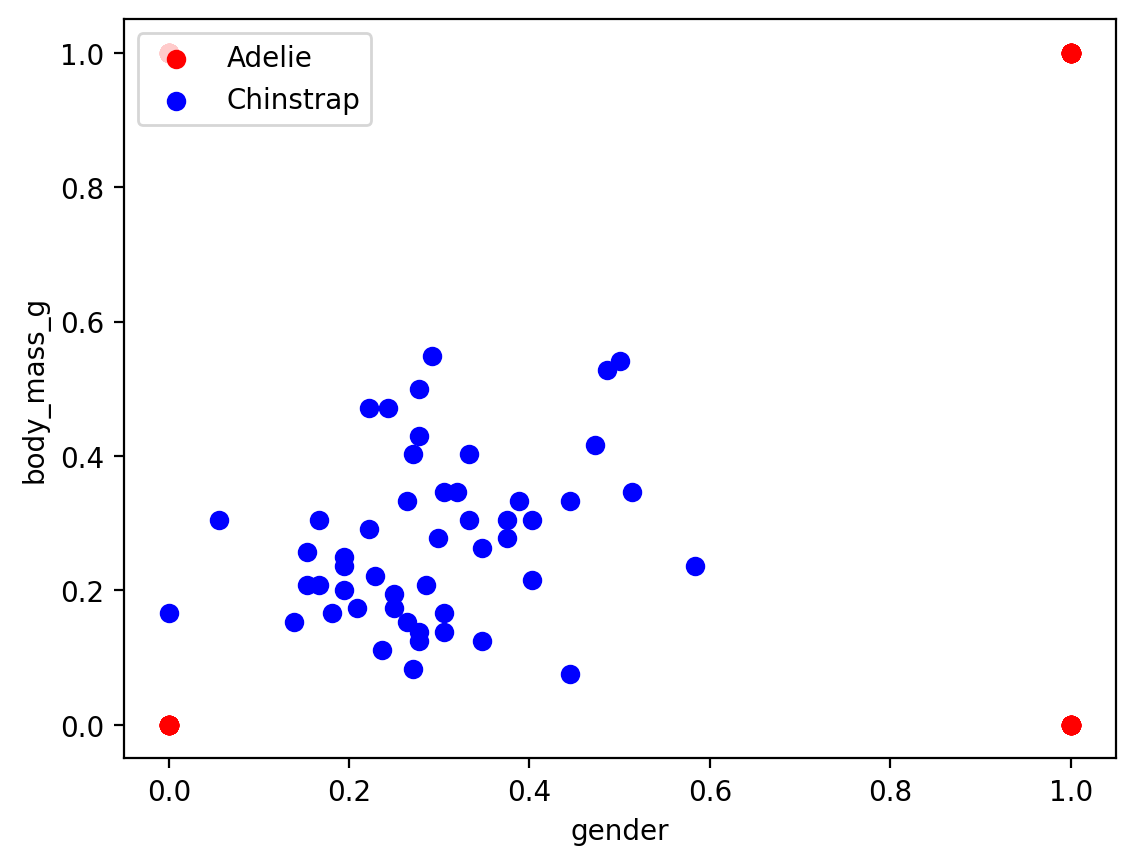
### flipper\_length\_mm , body\_mass\_g

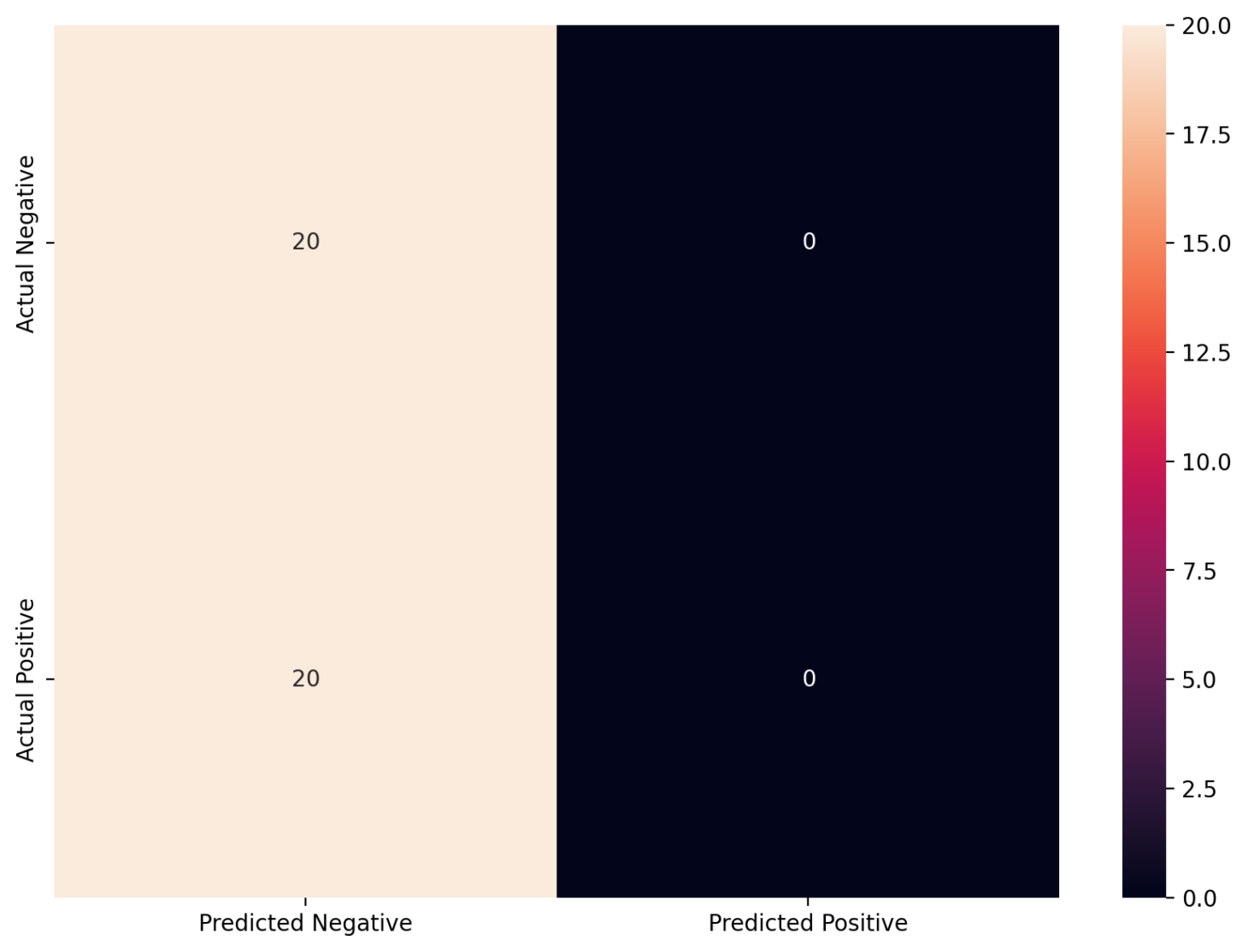




**Comment:** test accuracy = 0.5

### gender , body\_mass\_g

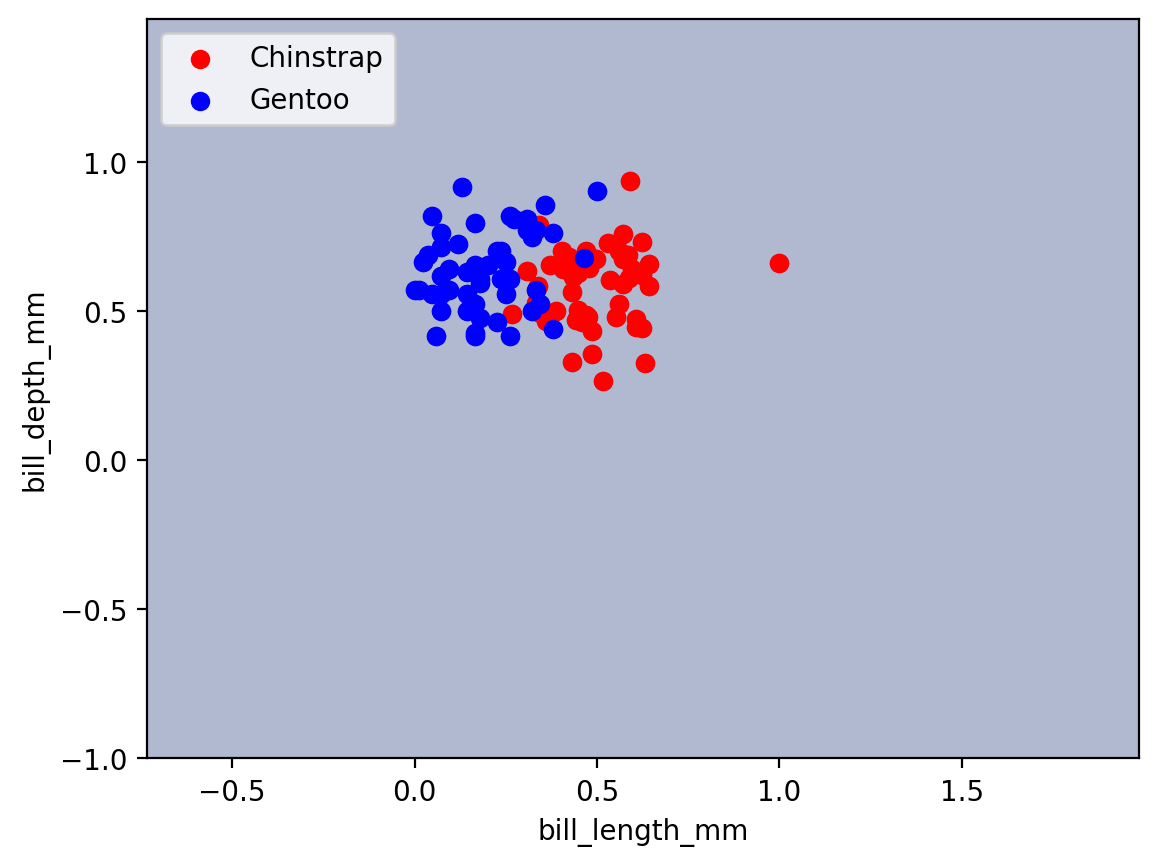
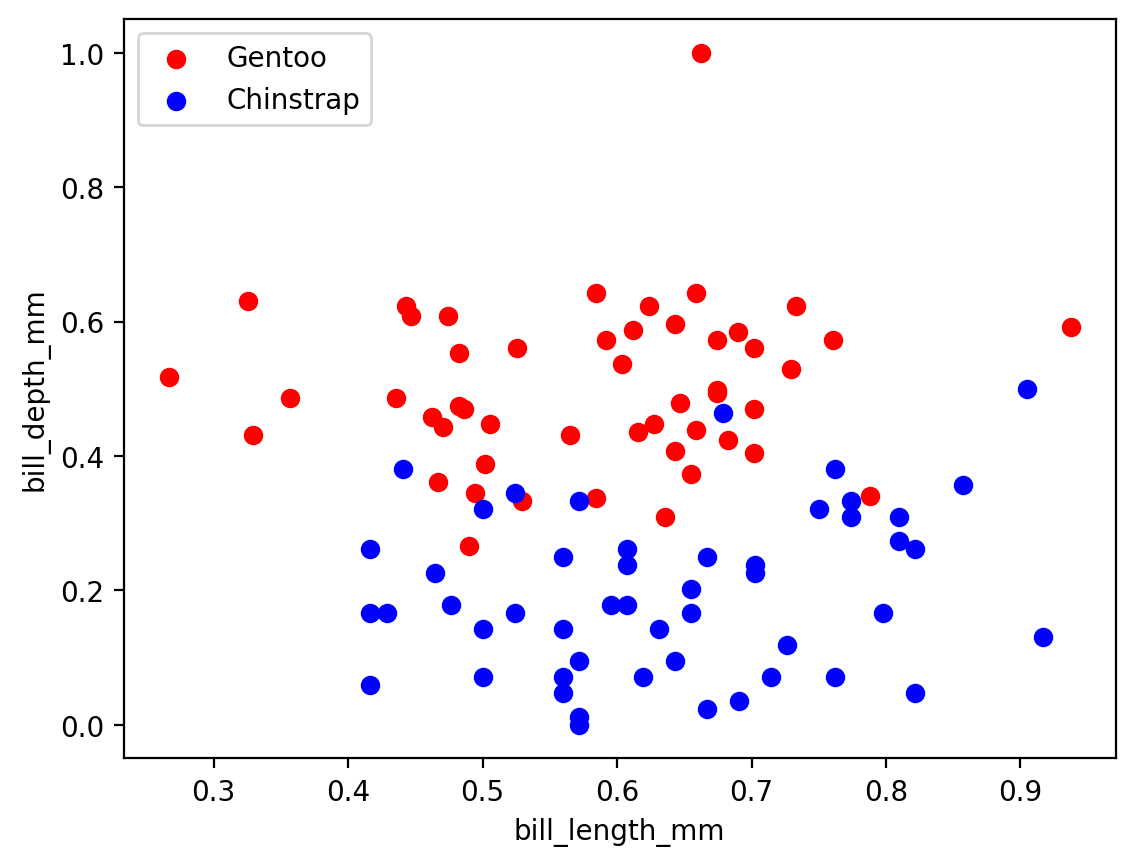


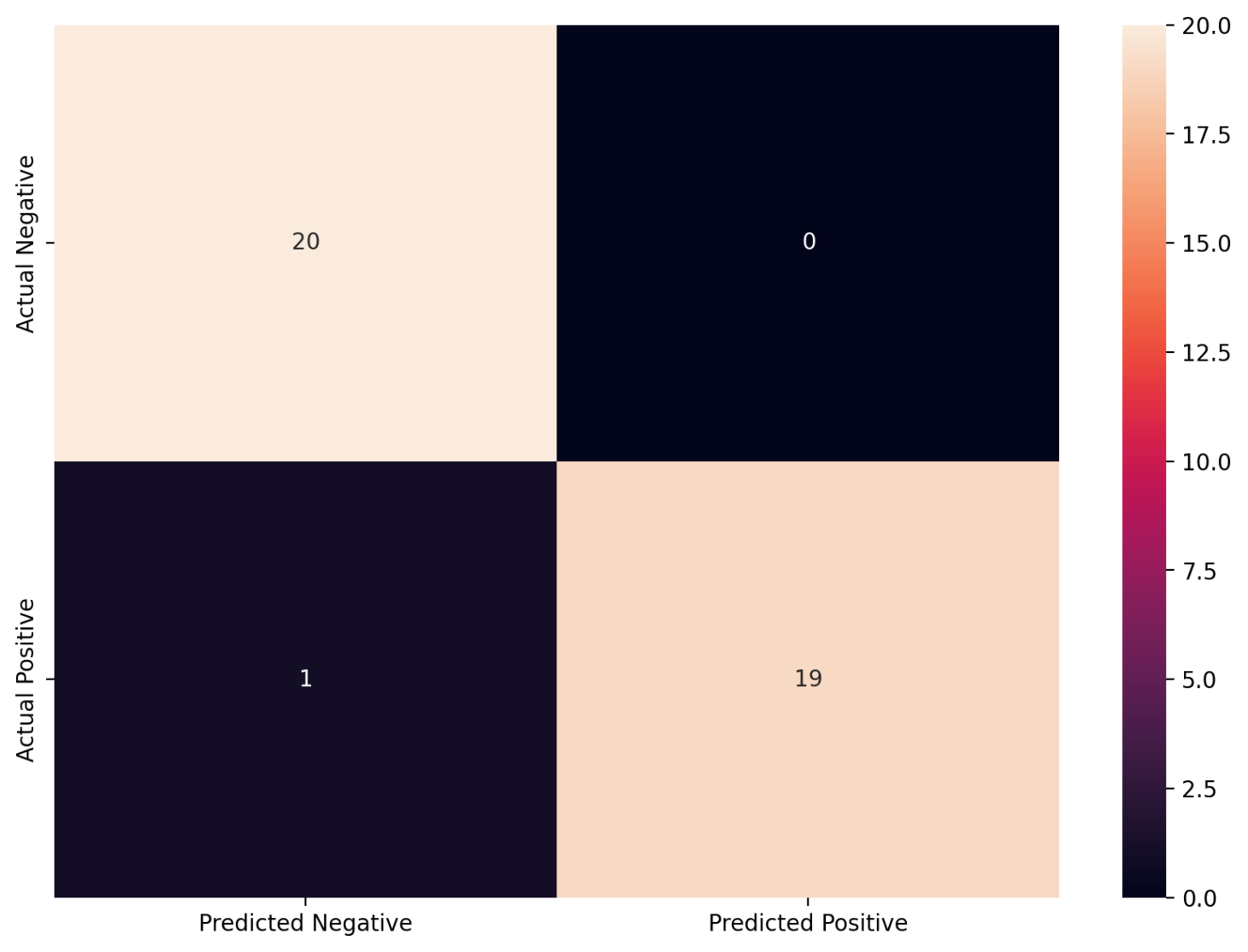


**Comment:** test accuracy = 0.5

# Chinstrap and Gentoo

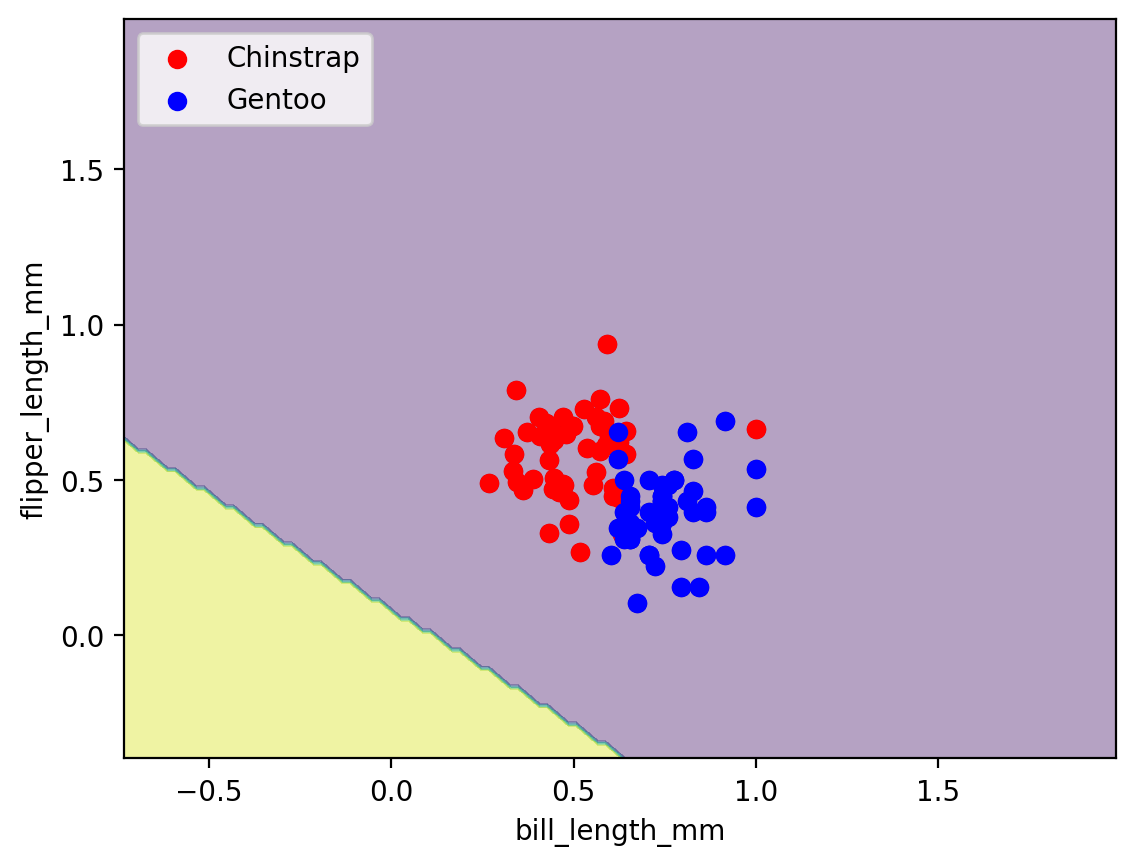
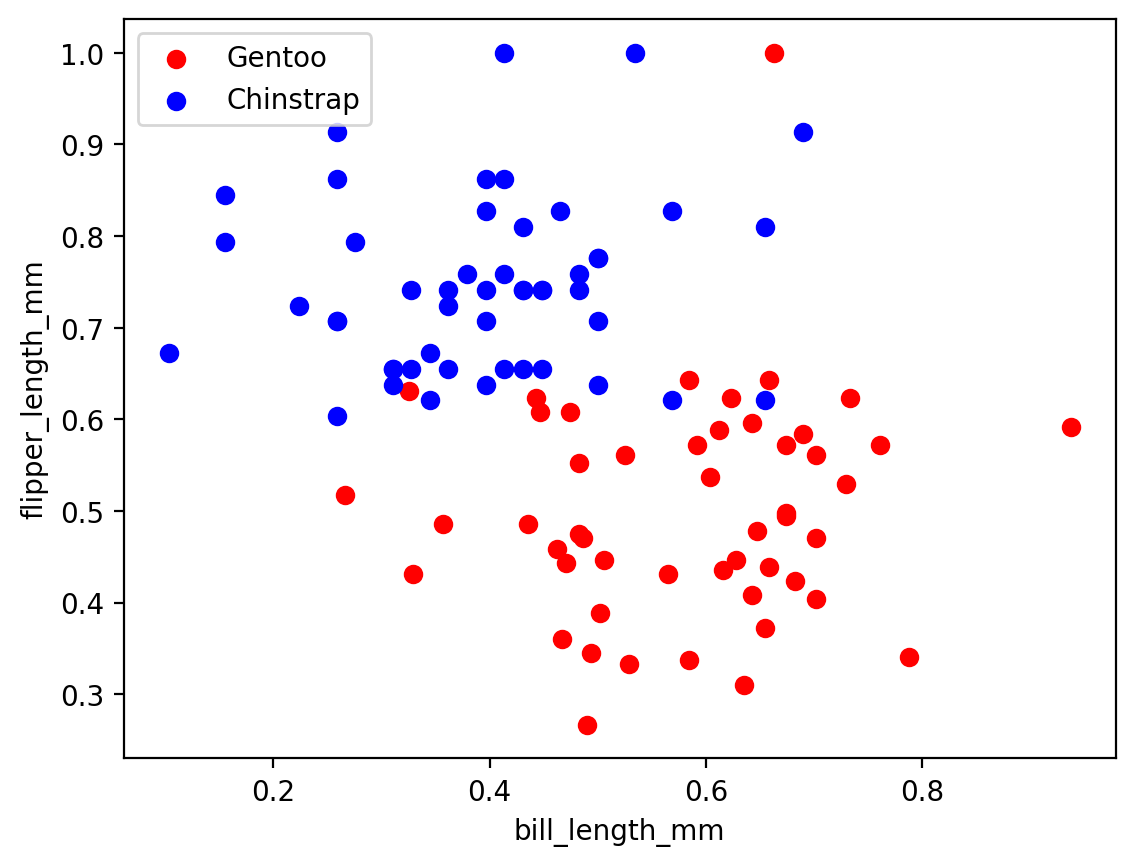
### bill\_length\_mm , bill\_depth\_mm

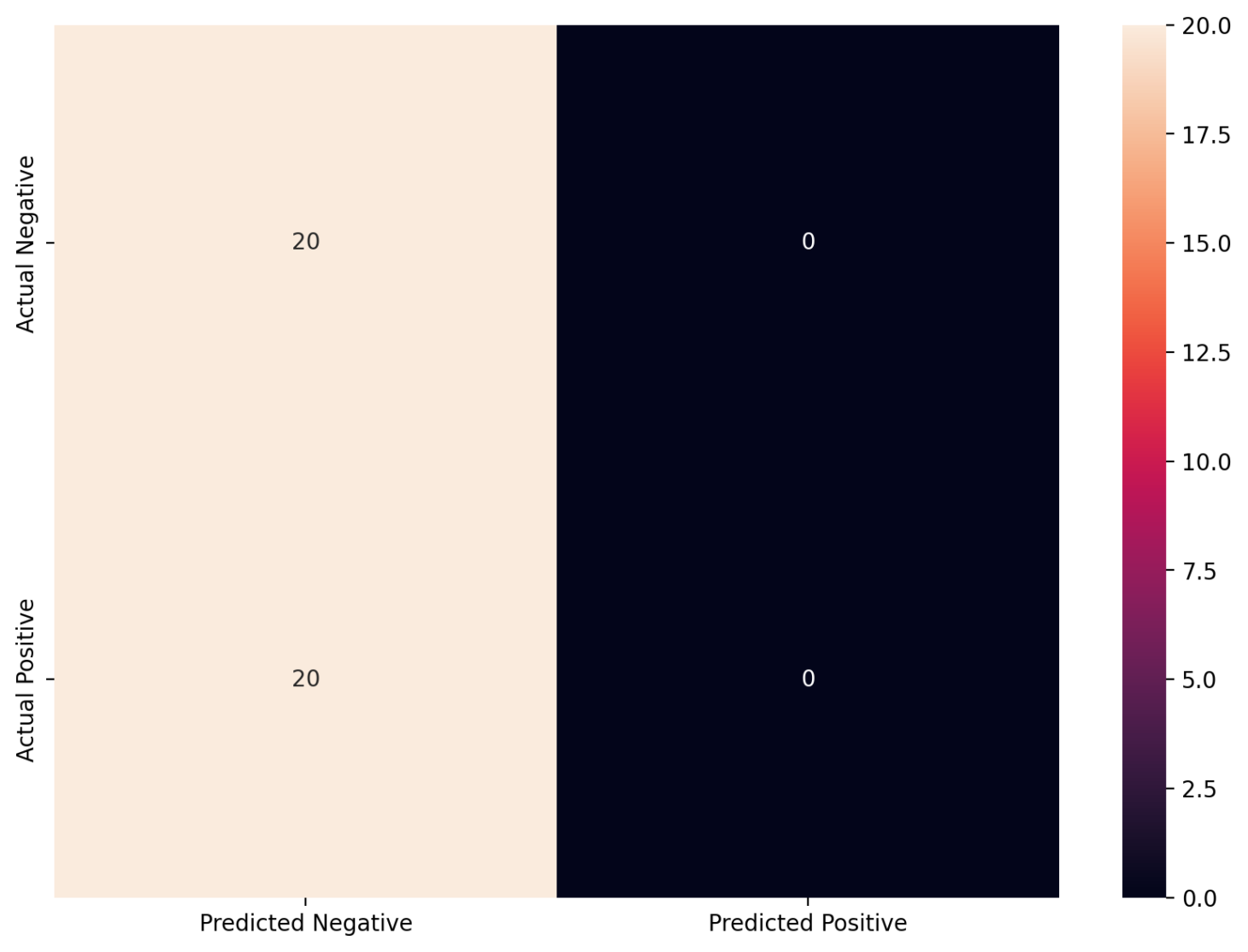




**Comment:** test accuracy = 0.5

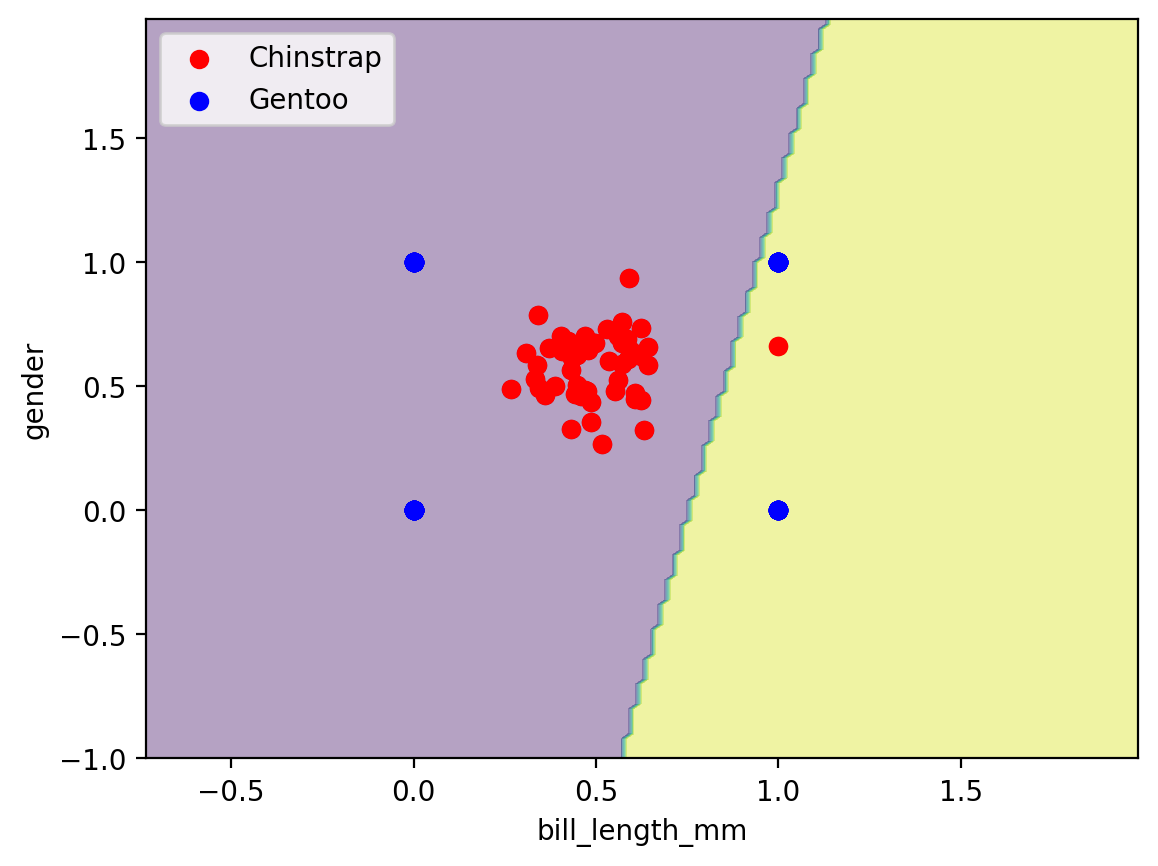
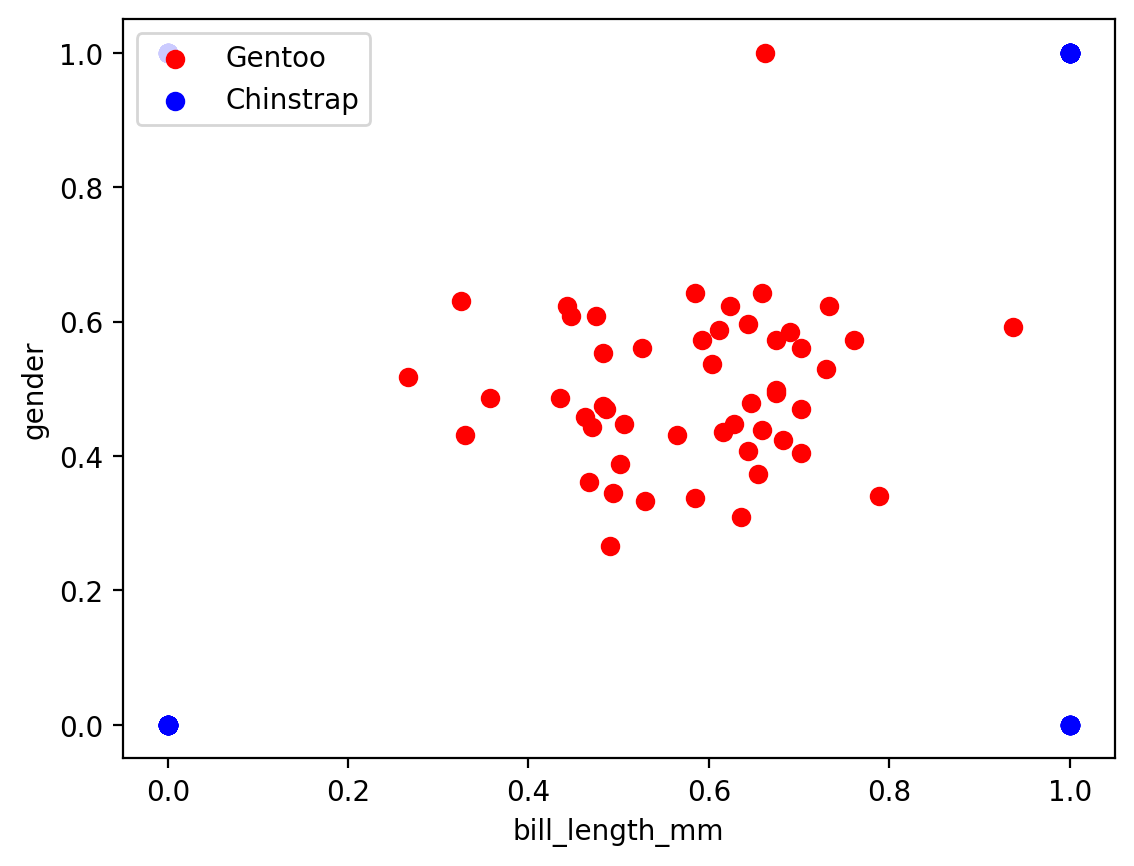
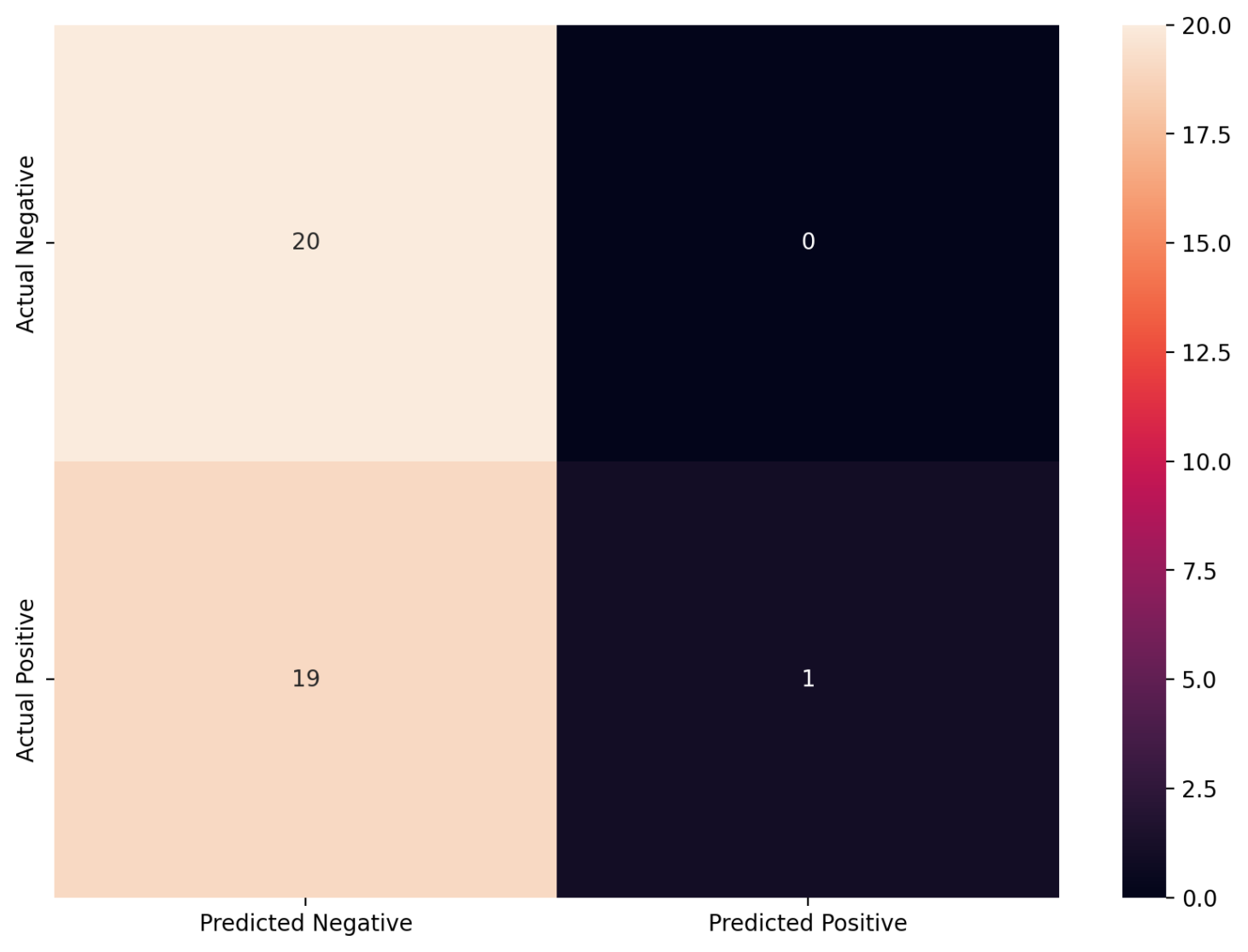
### bill\_length\_mm, flipper\_length\_mm





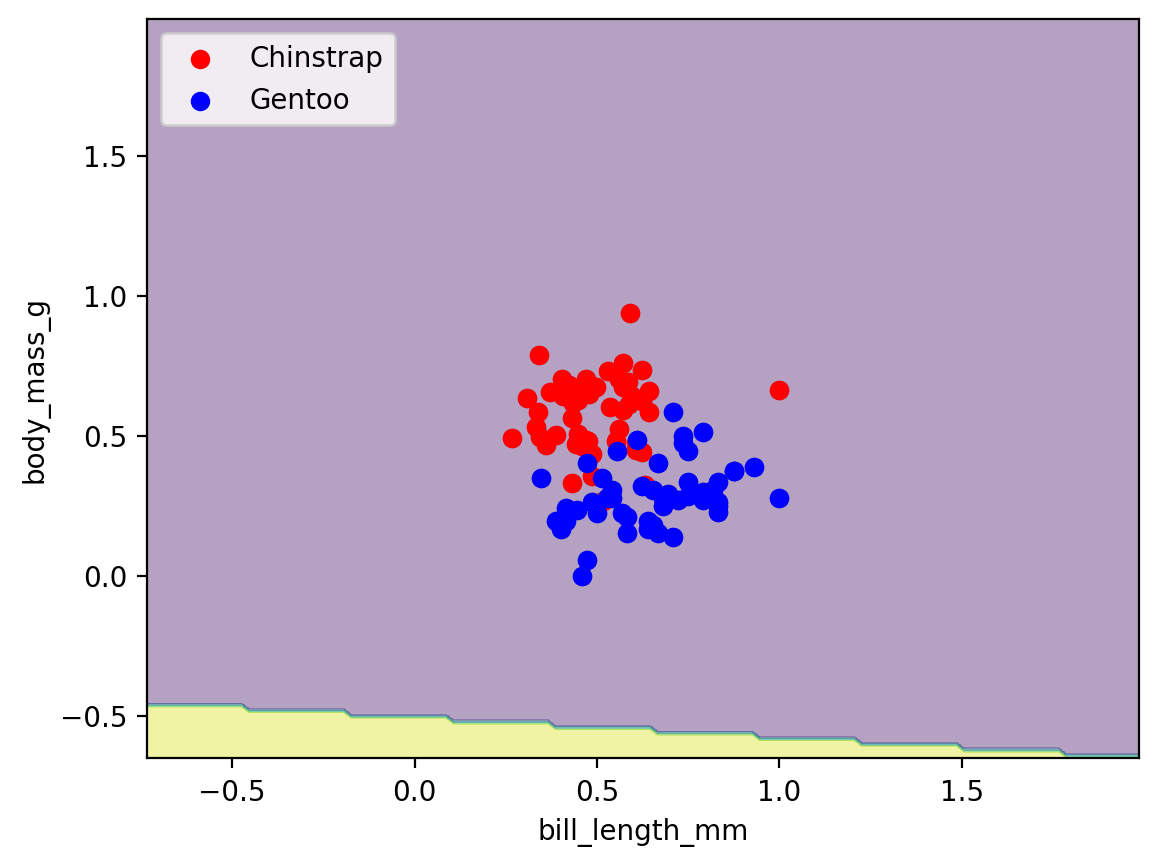
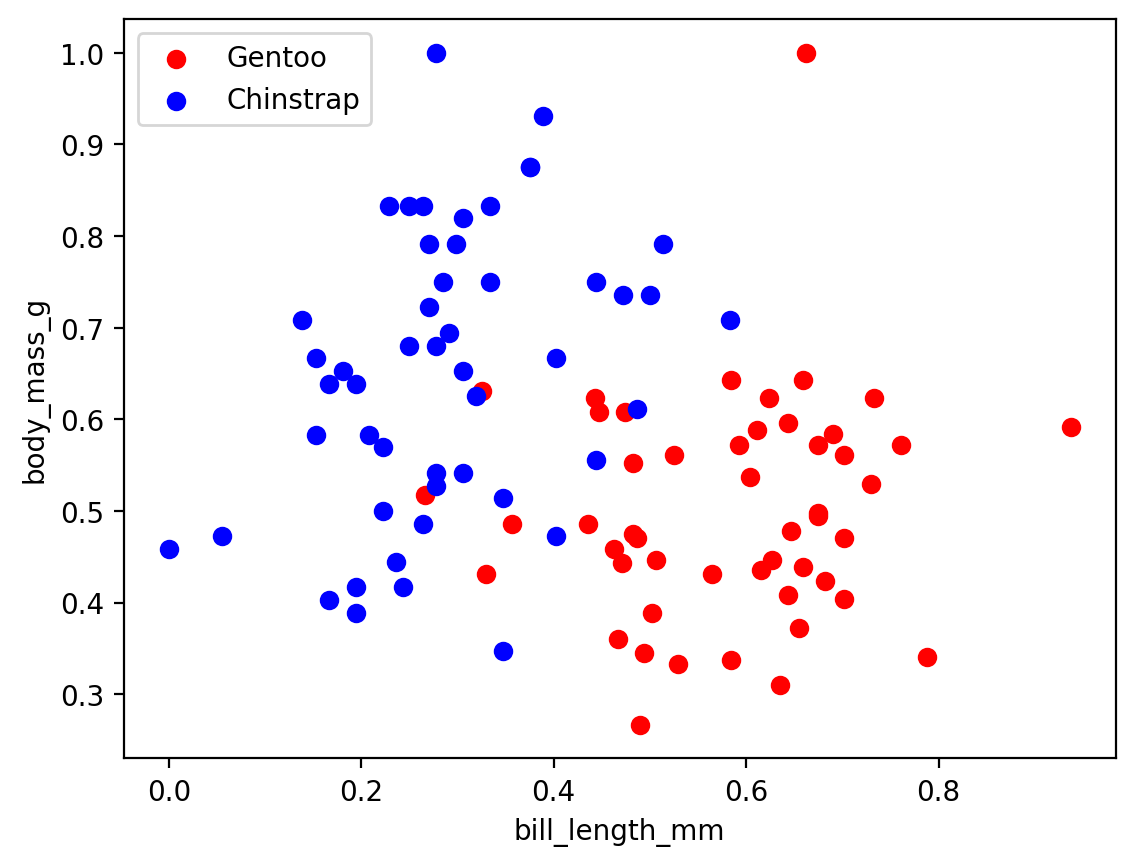
**Comment:** test accuracy = 0.5

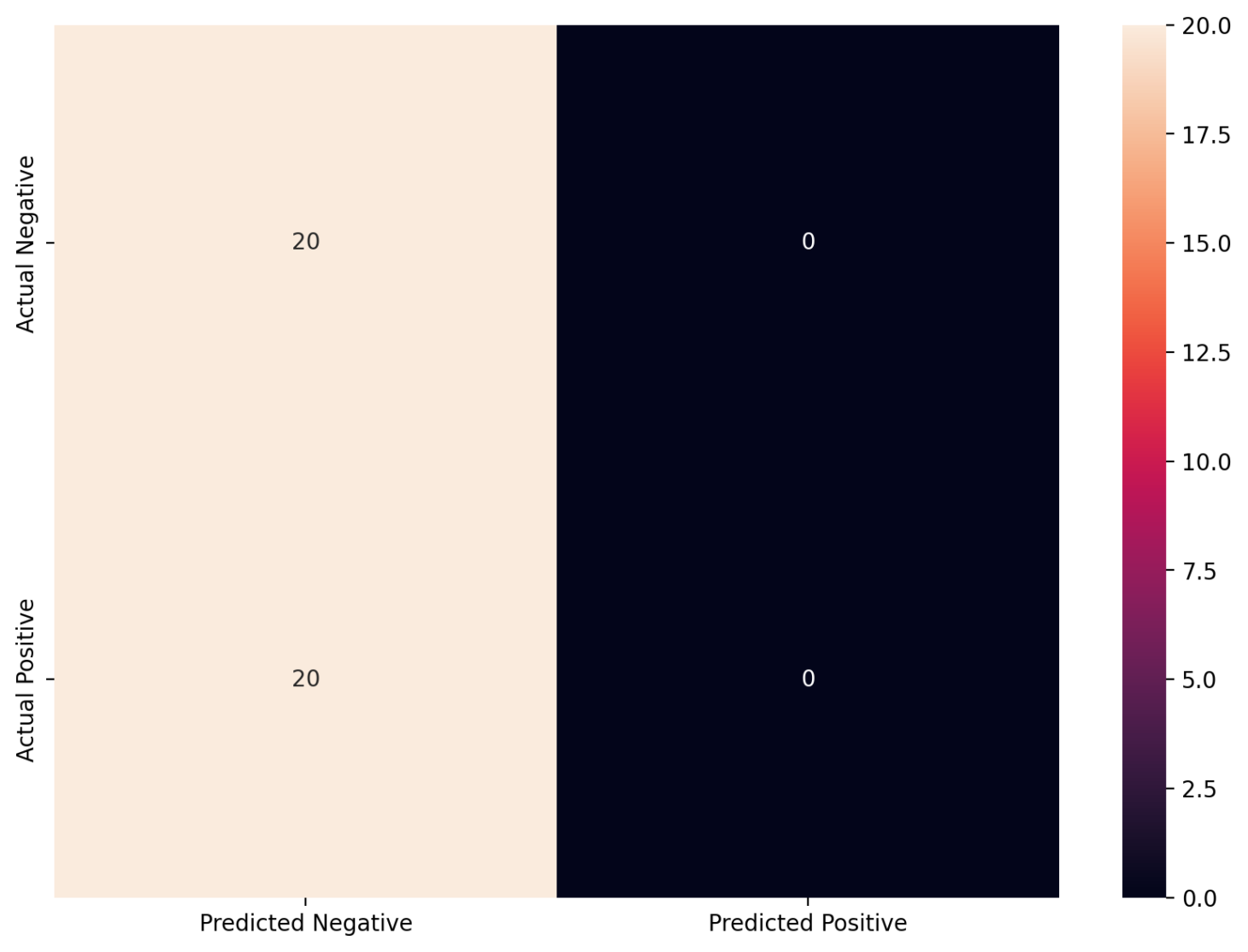
### bill\_length\_mm , gender

**Comment:** test accuracy = 0.525

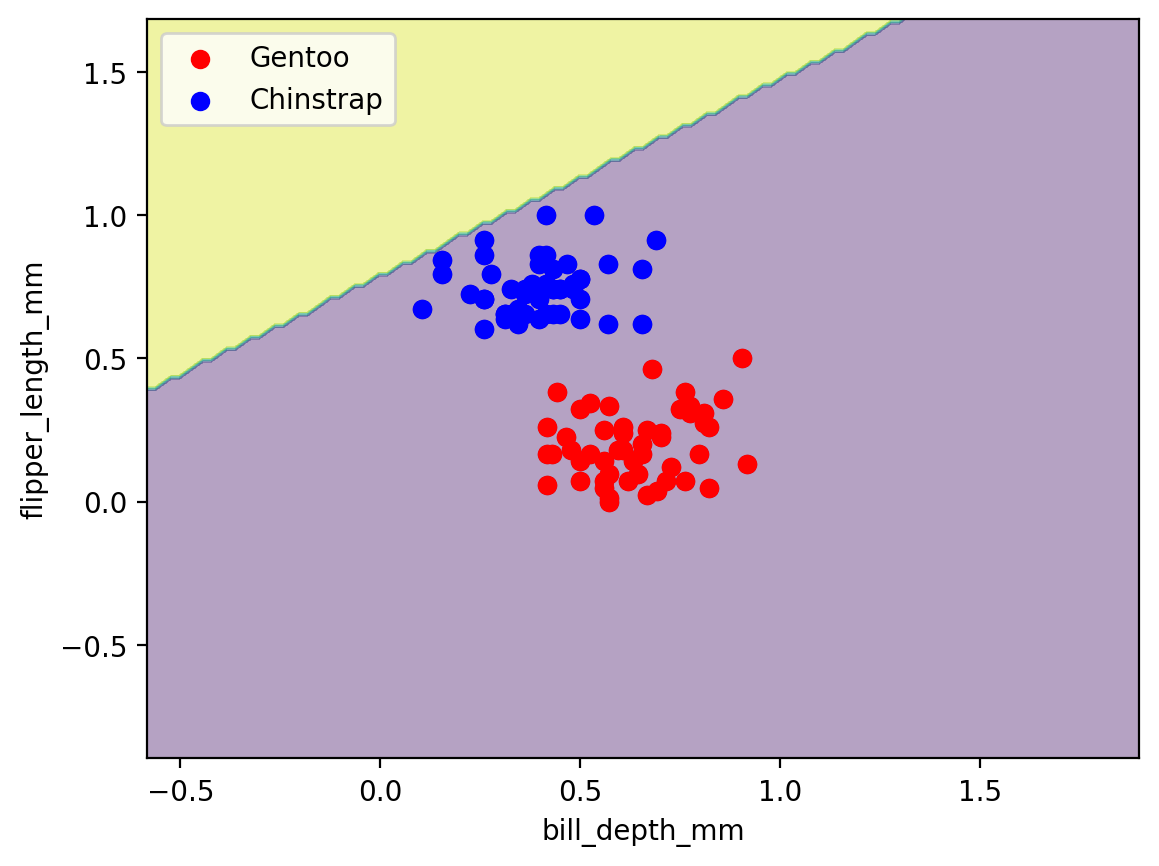
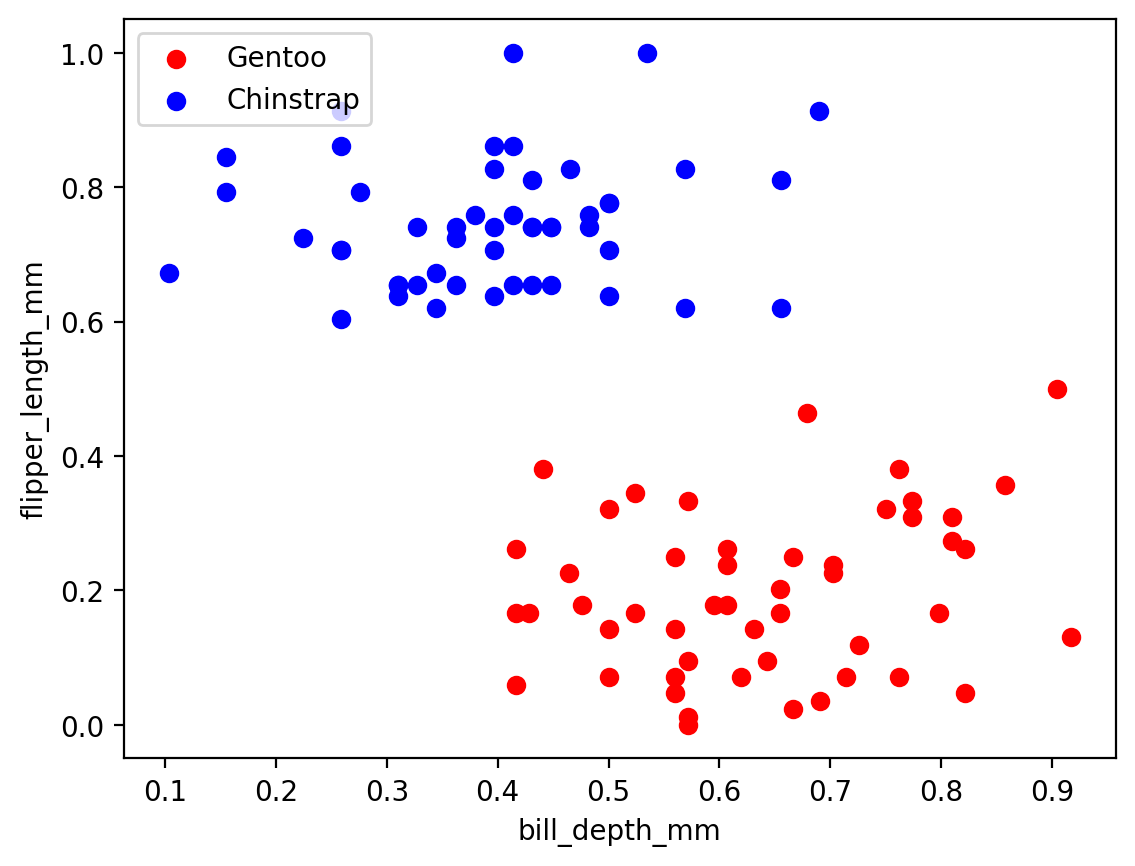
### bill\_length\_mm , body\_mass\_g

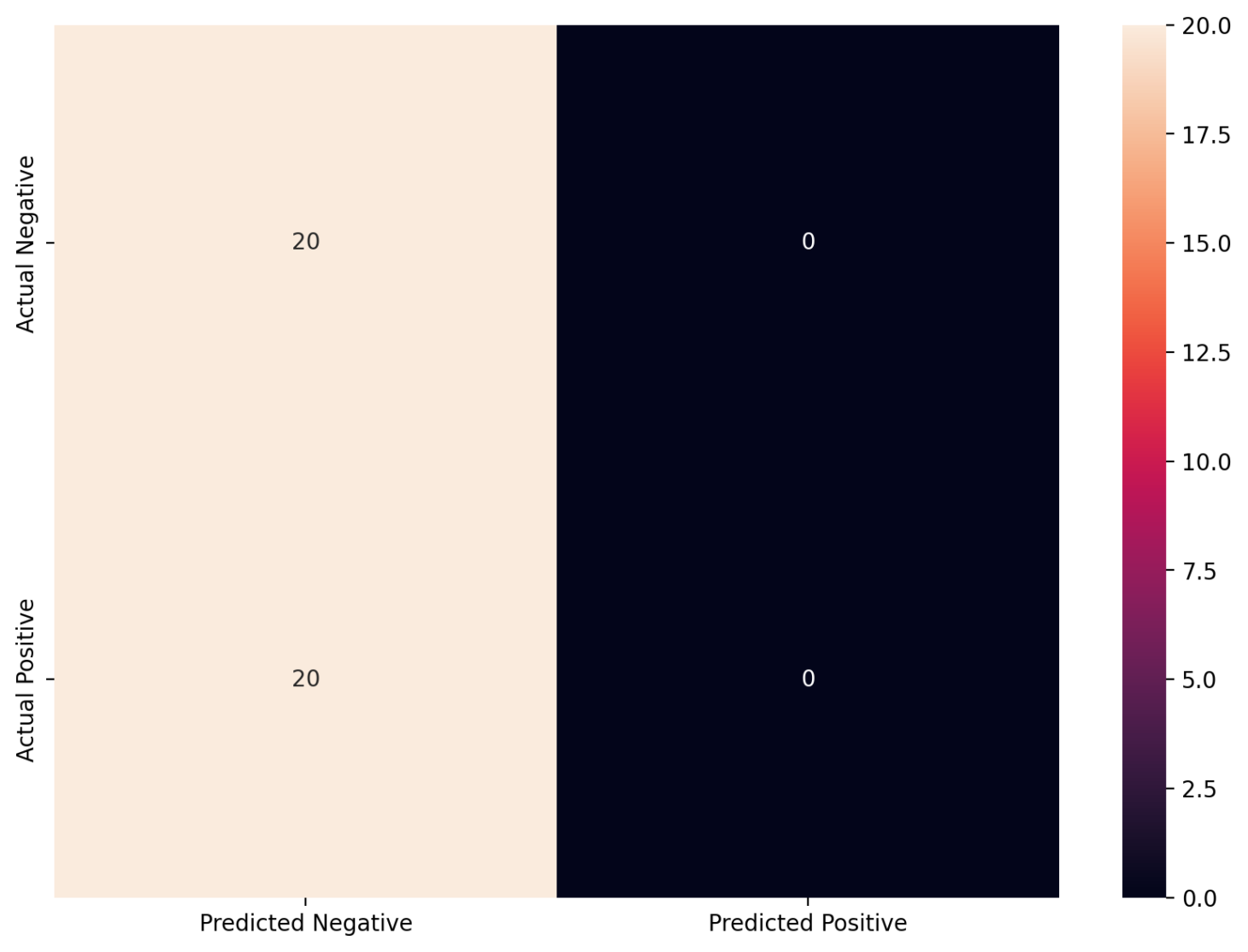




**Comment:** test accuracy = 0.5

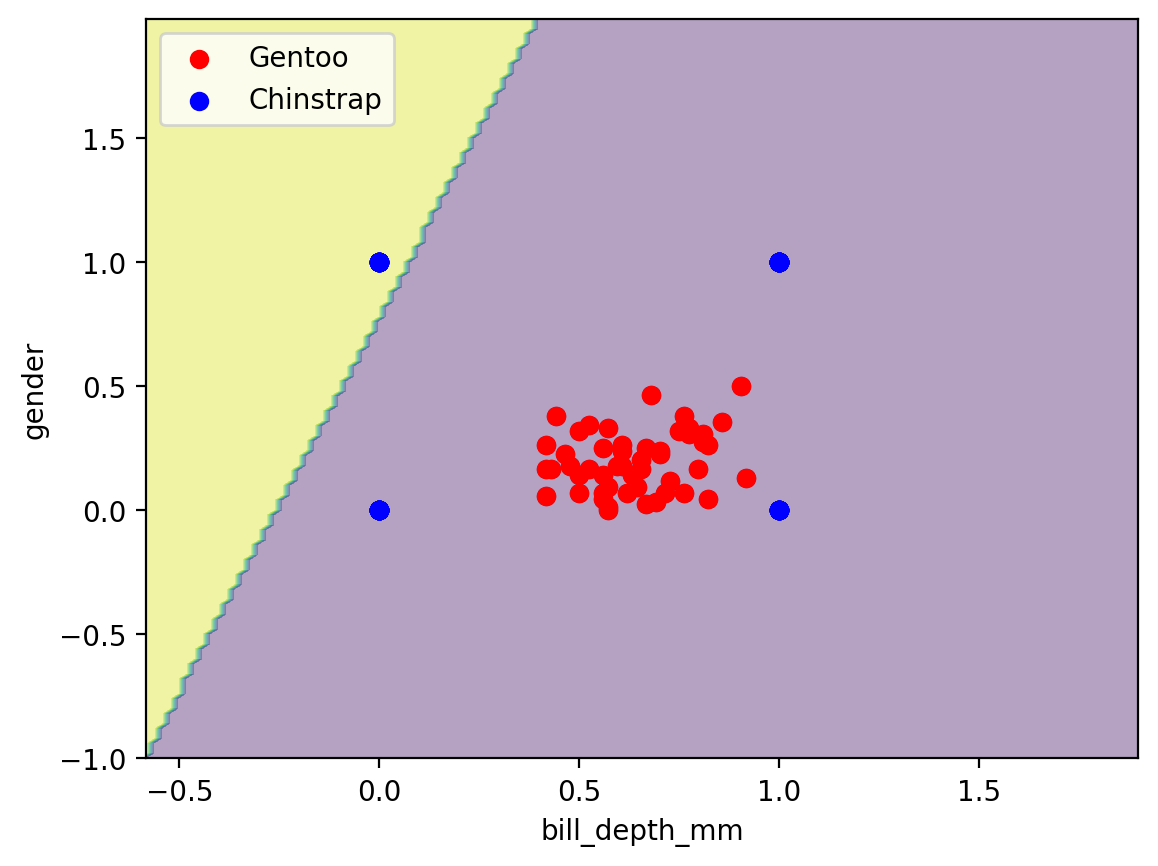
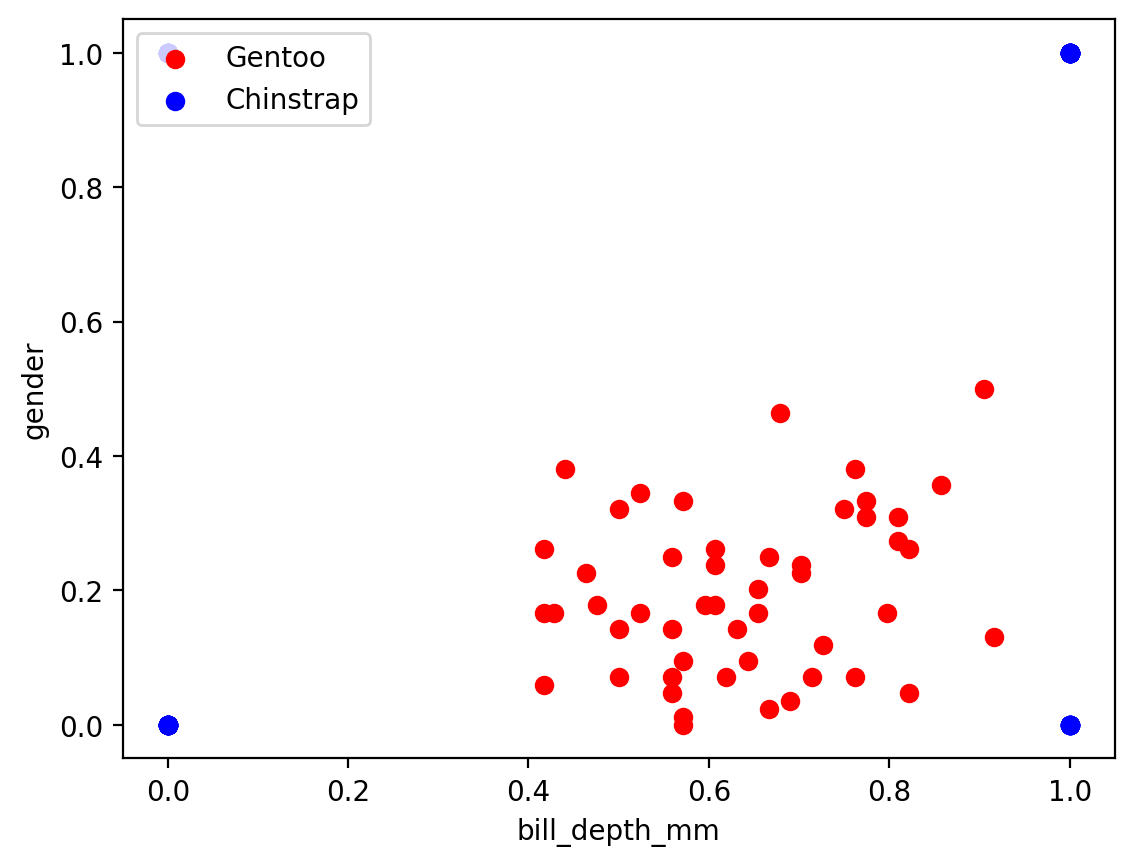
### bill\_depth\_mm , flipper\_length\_mm

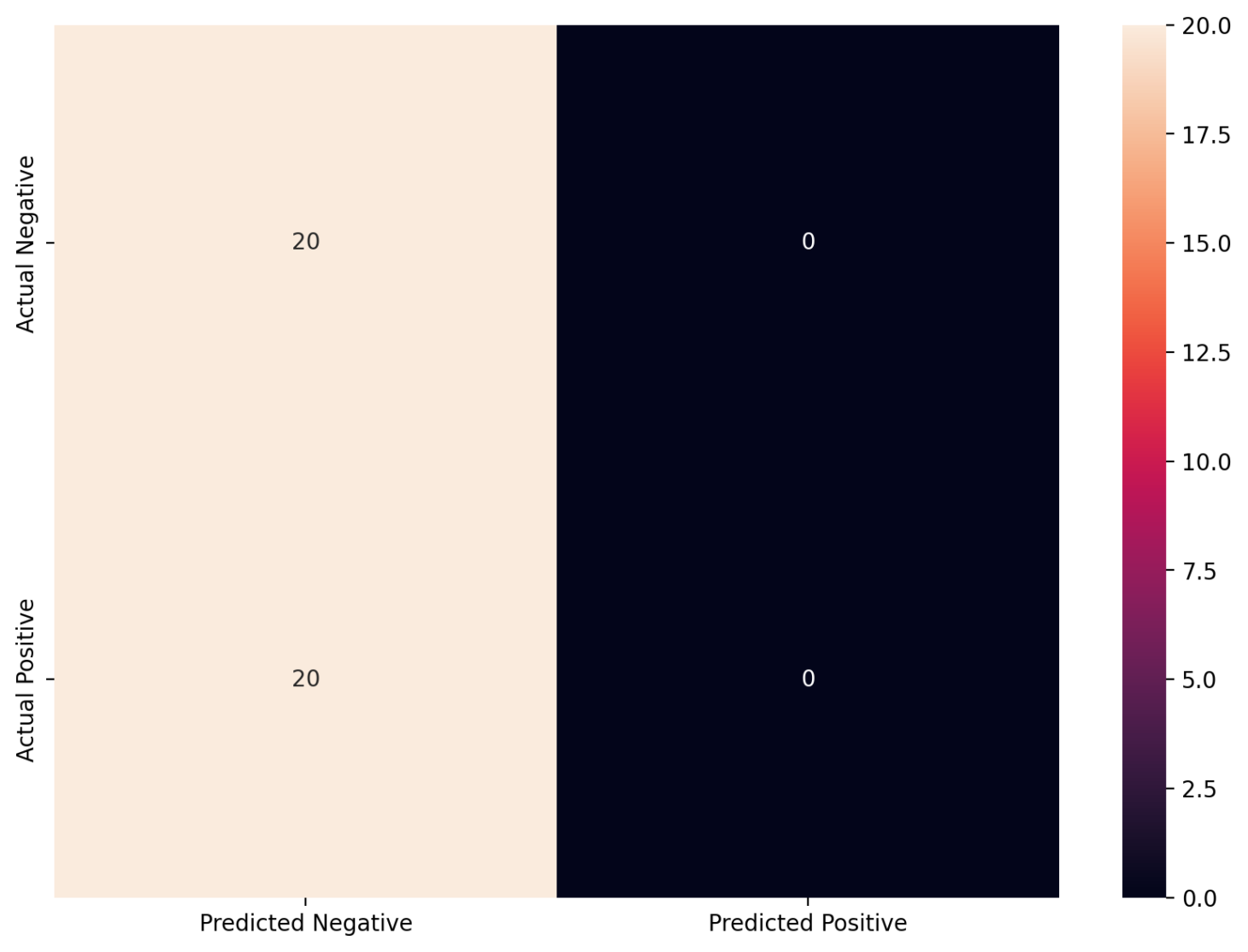




**Comment:** test accuracy = 0.5

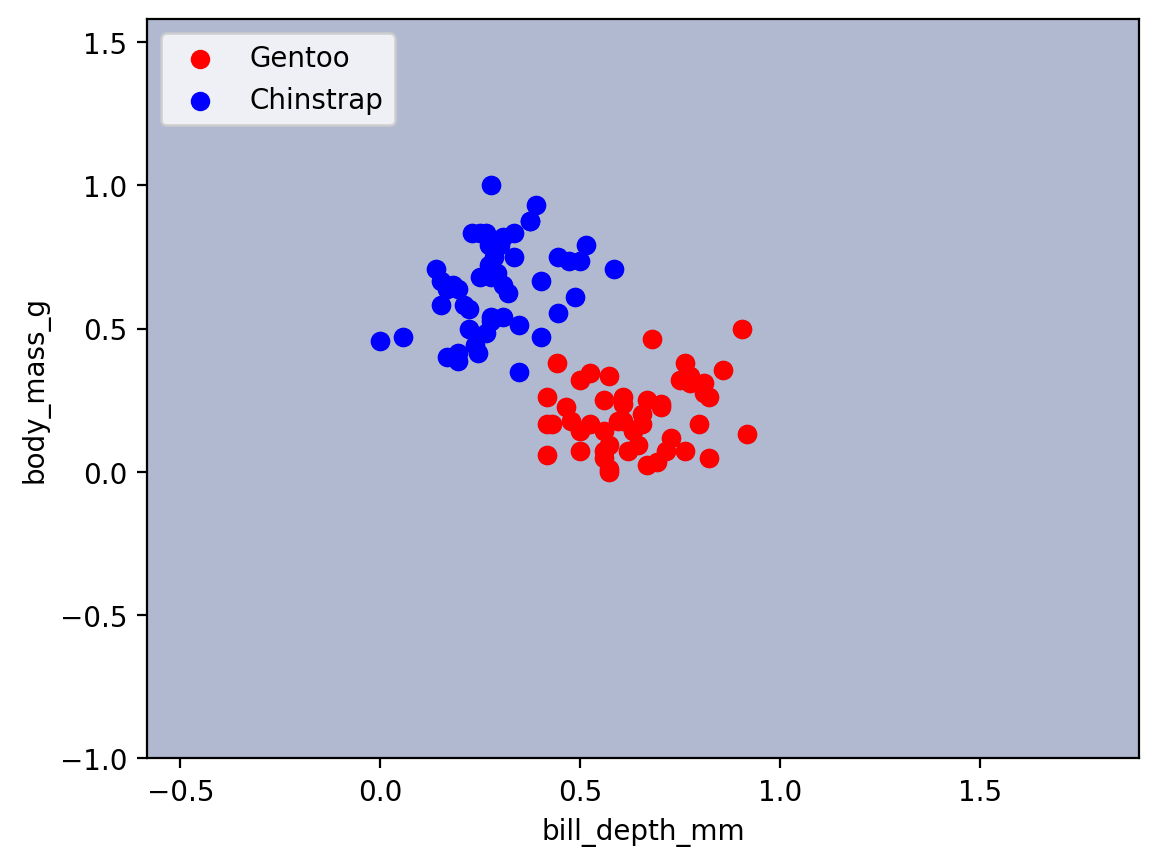
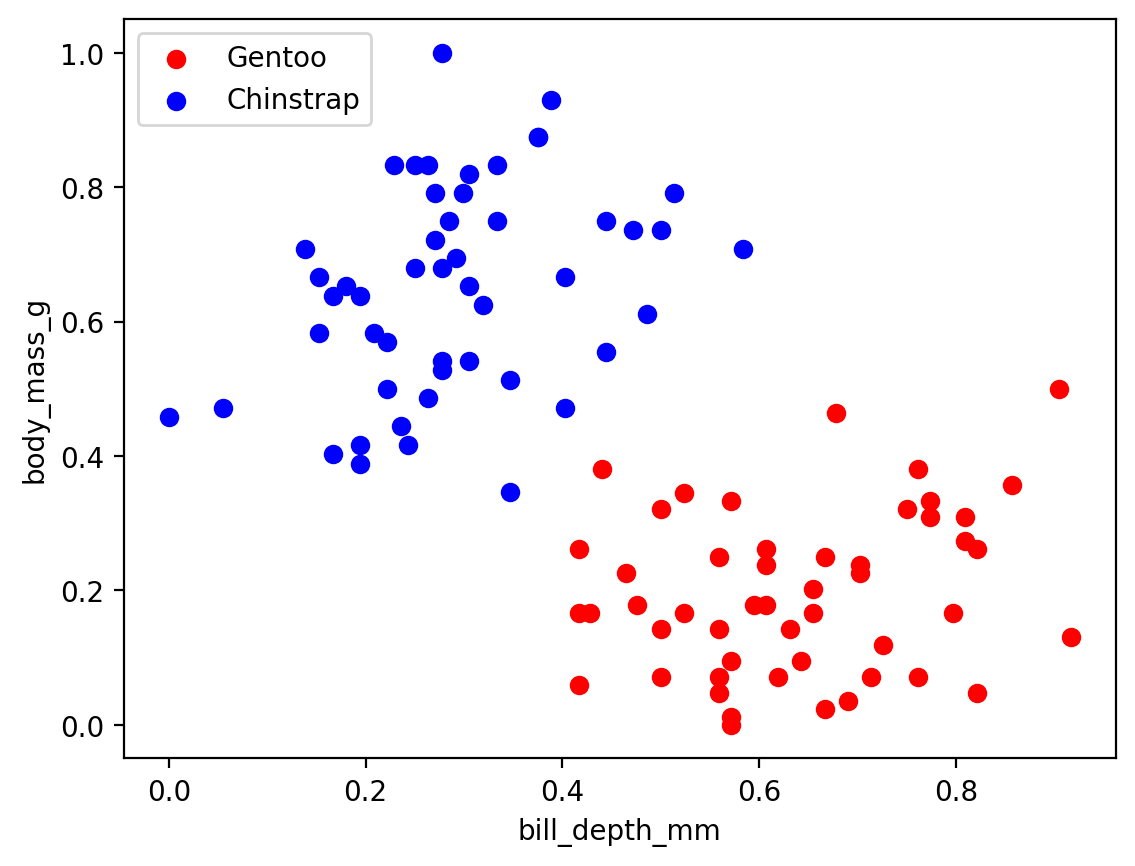
bill\_depth\_mm , gender

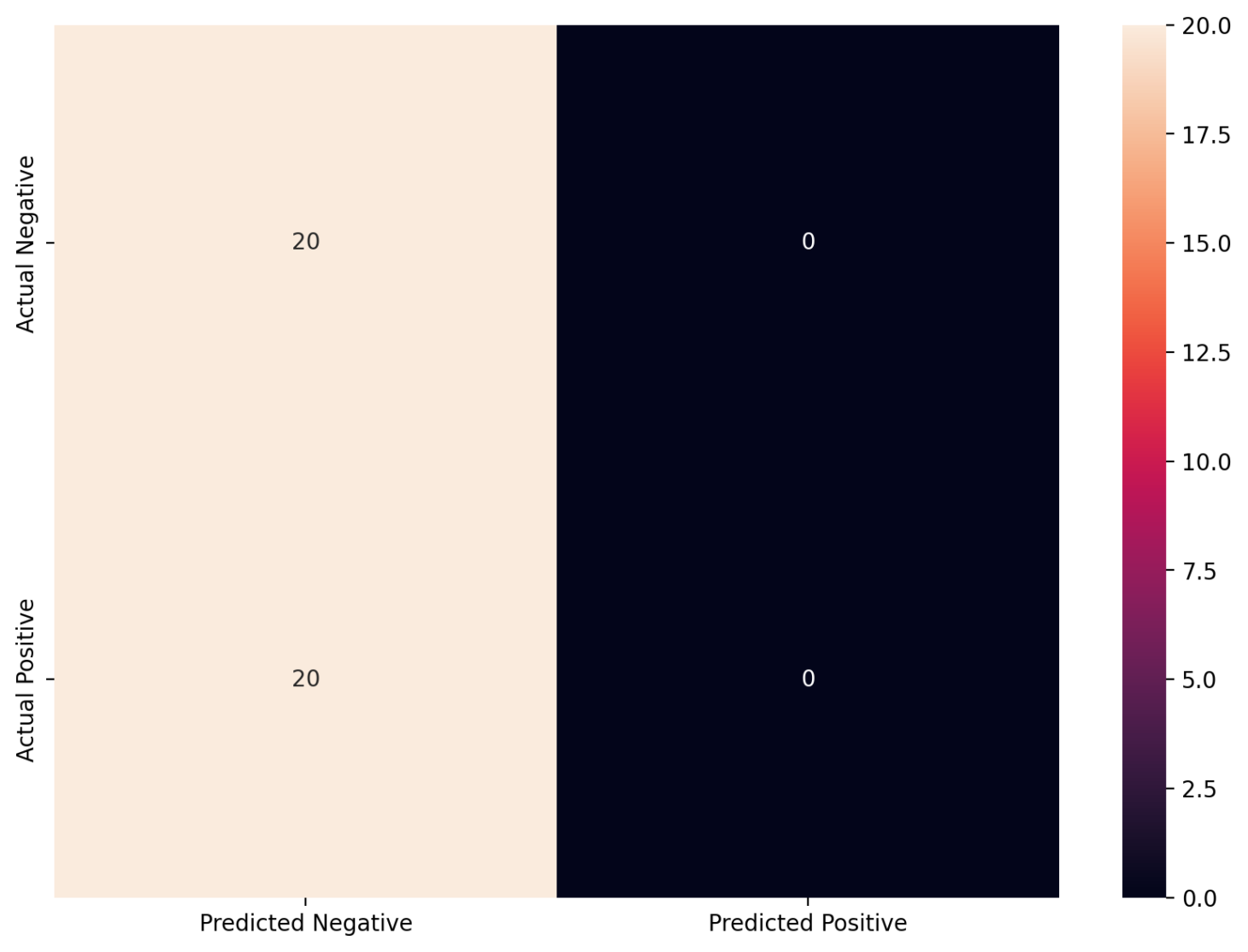




**Comment:** test accuracy = 0.5

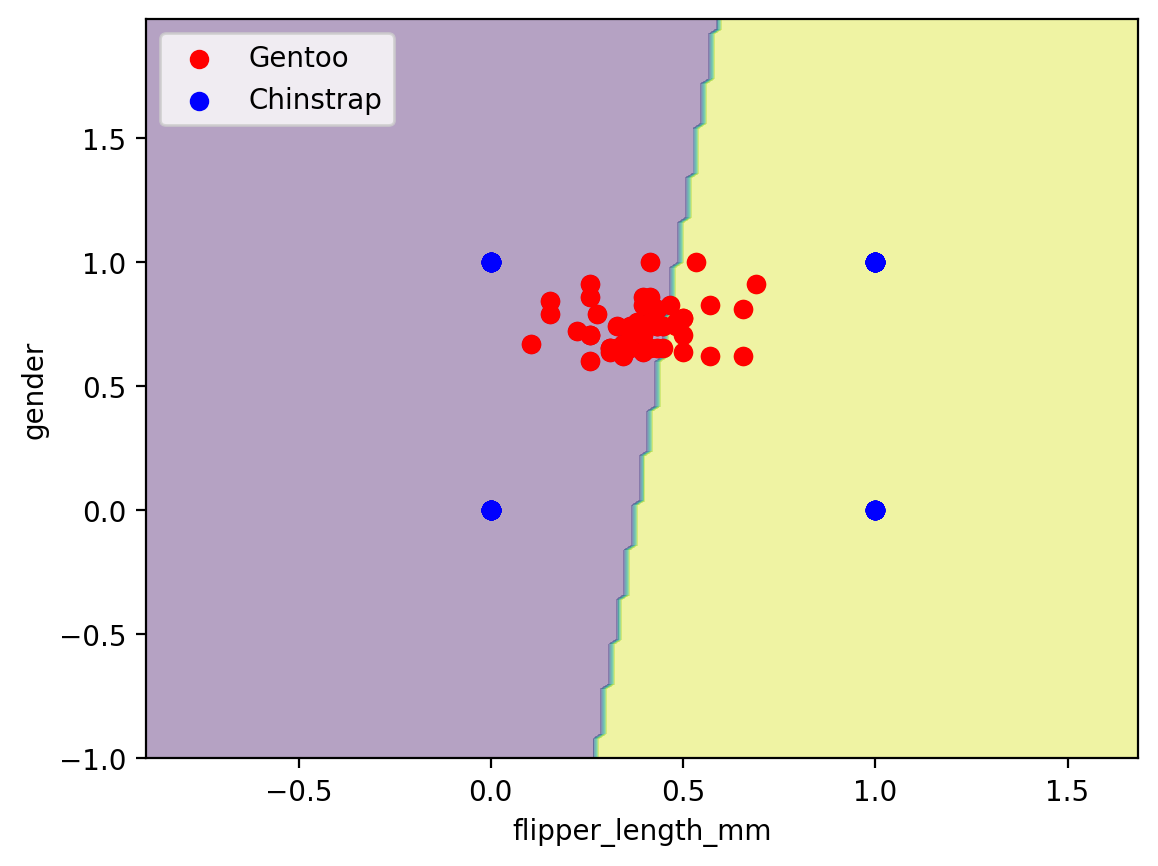
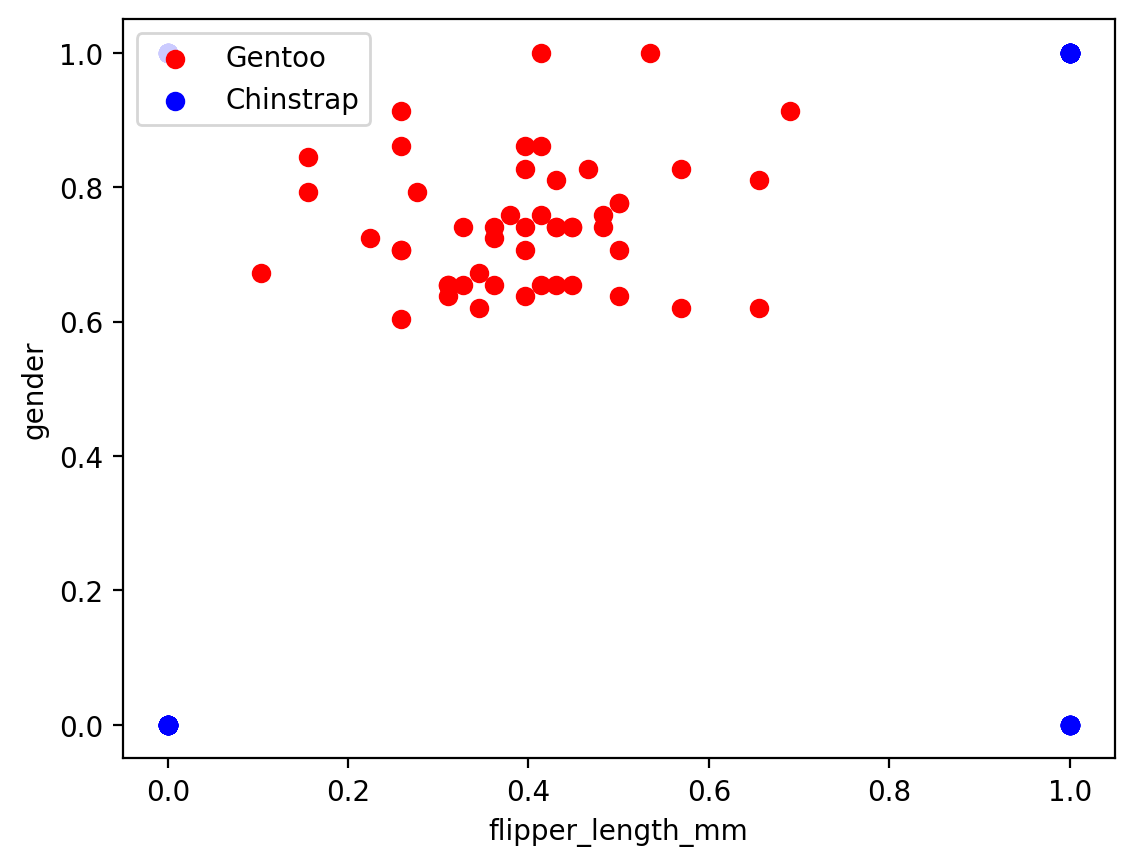
bill\_depth\_mm , body\_mass\_g

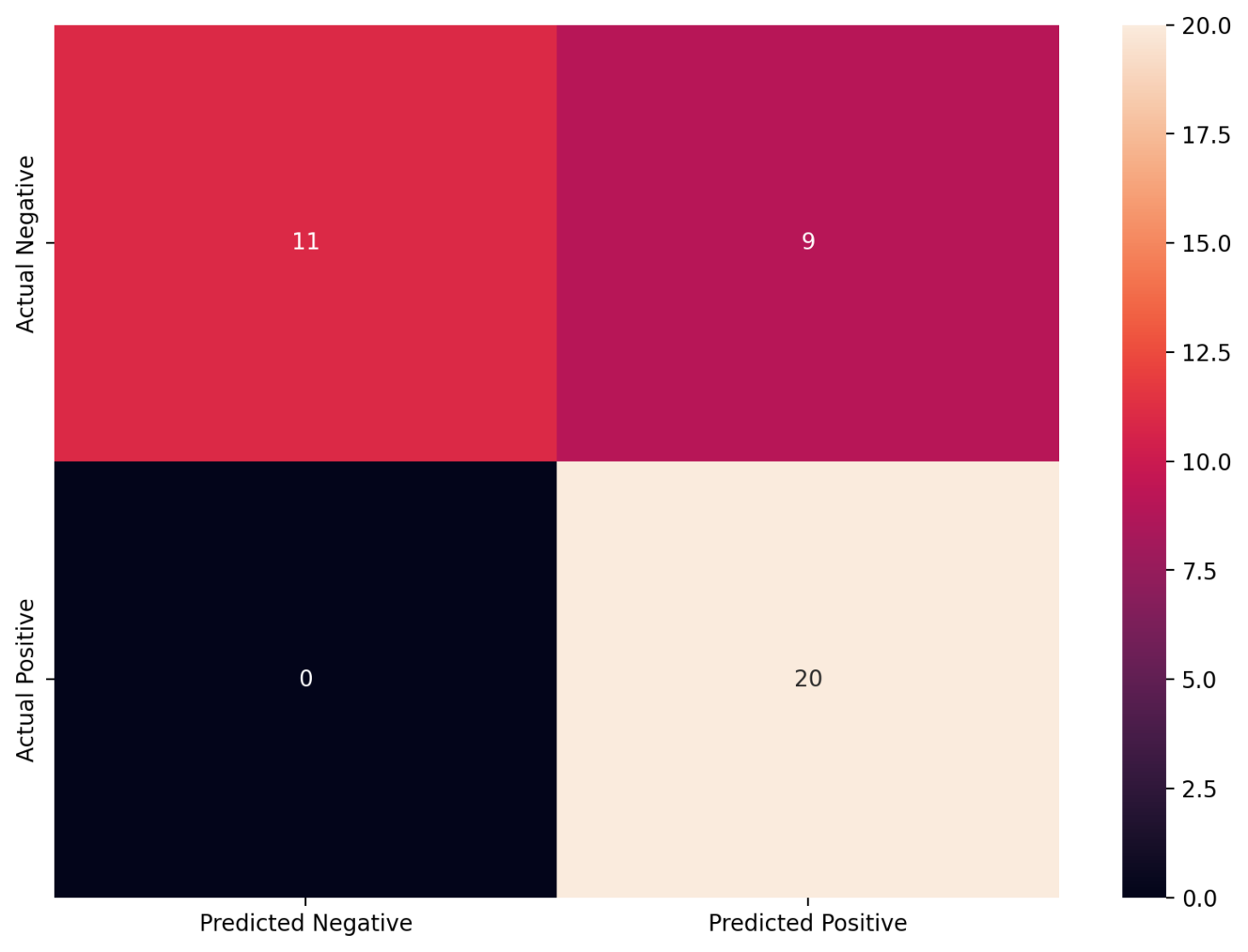




**Comment:** test accuracy = 0.5

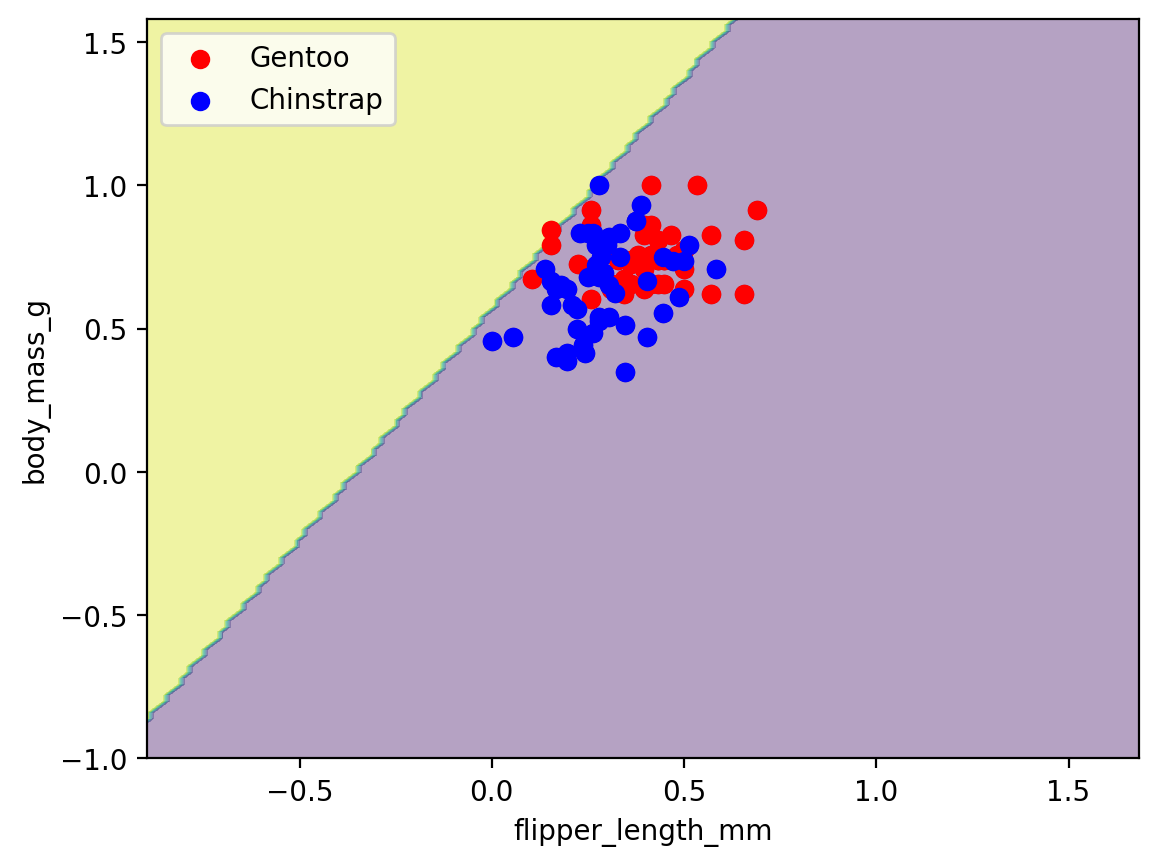
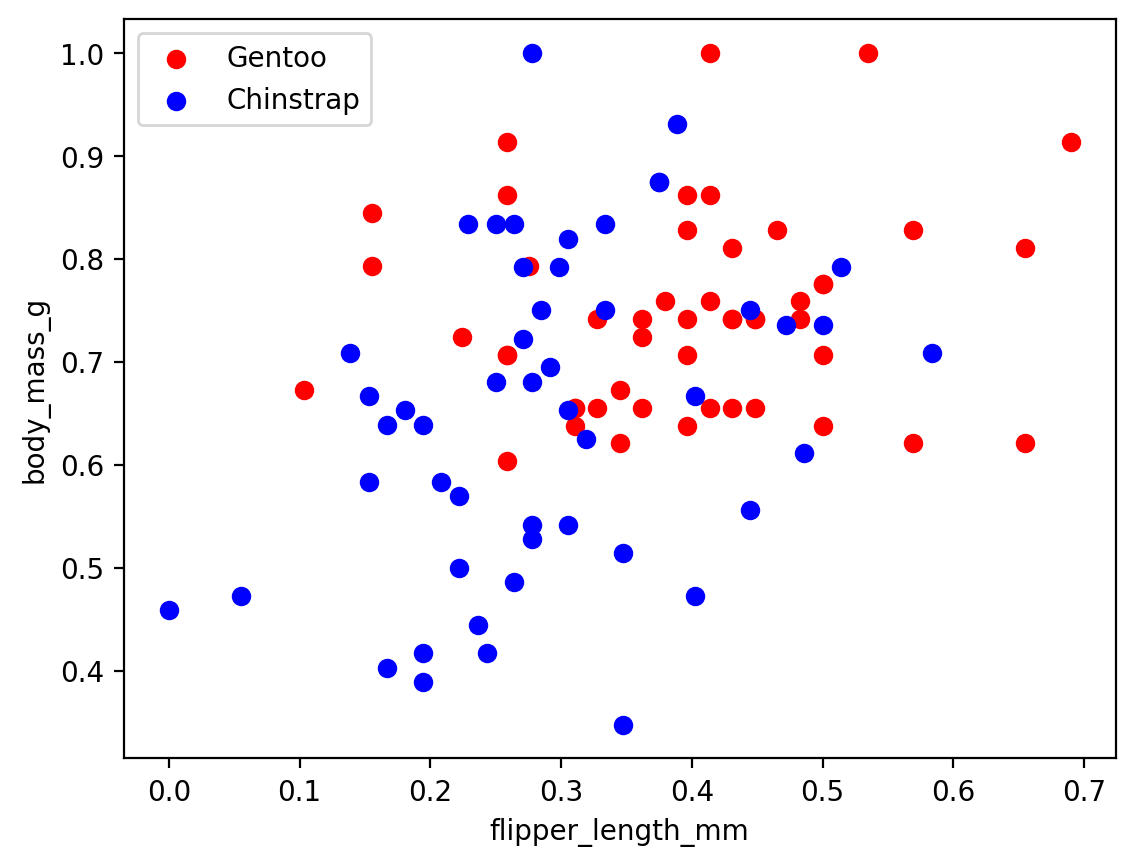
### flipper\_length\_mm , gender

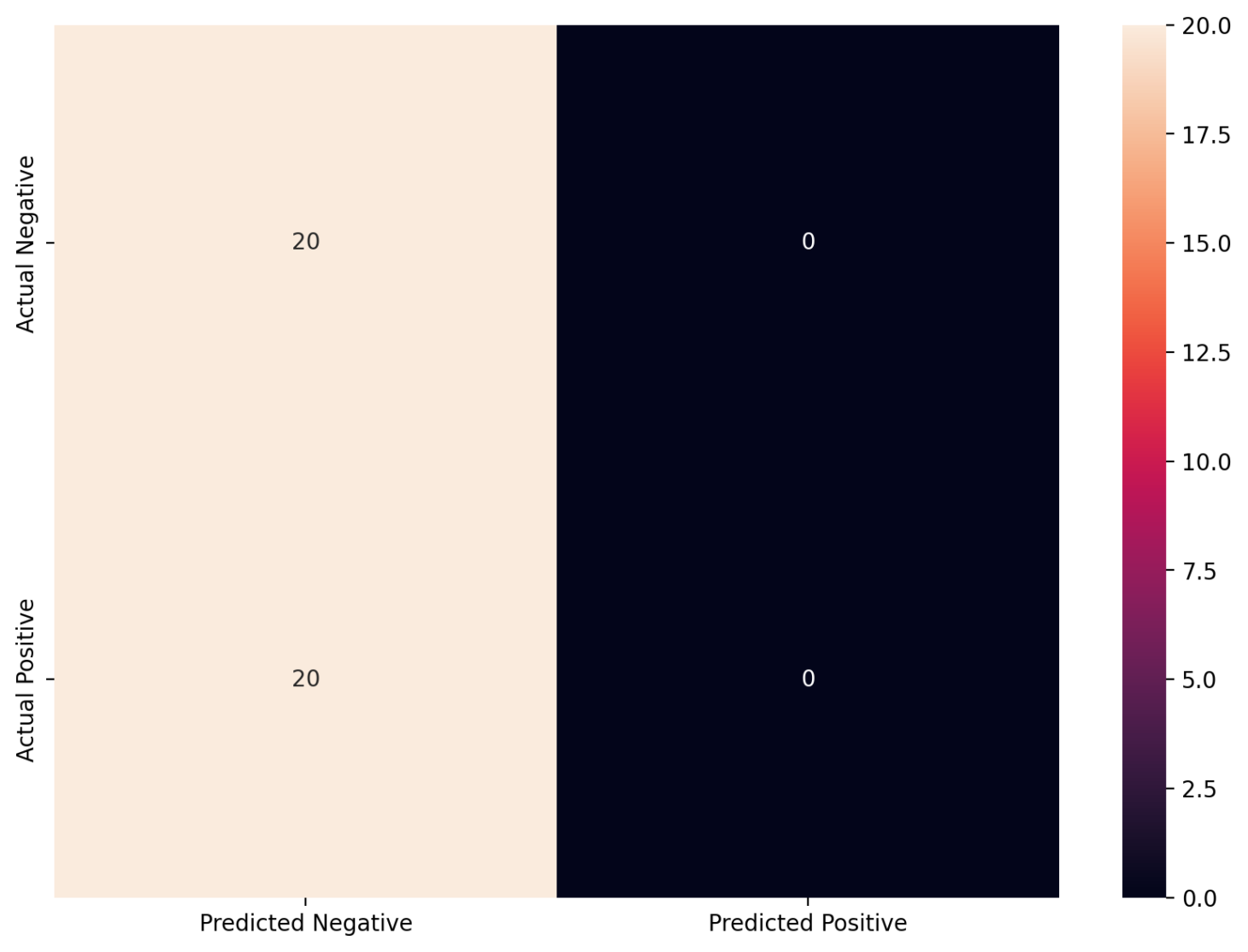




**Comment:**test accuracy = 0.775

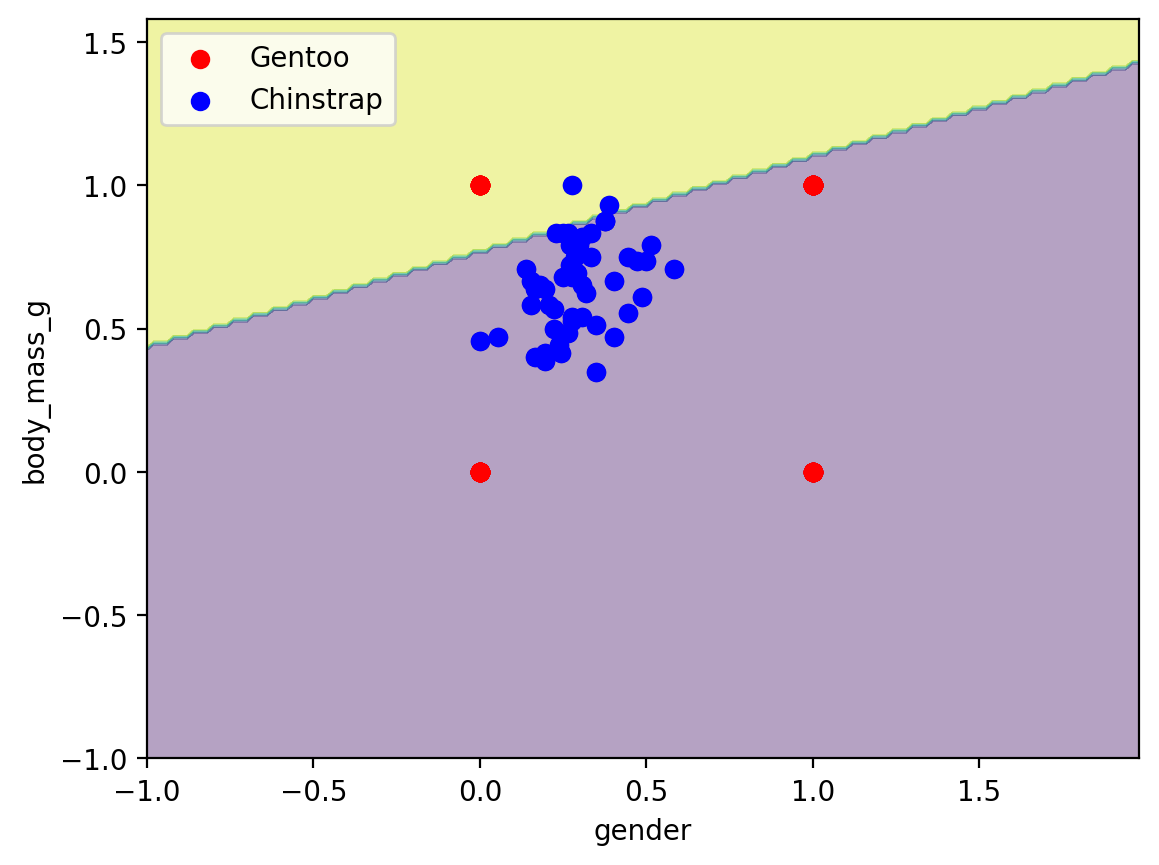
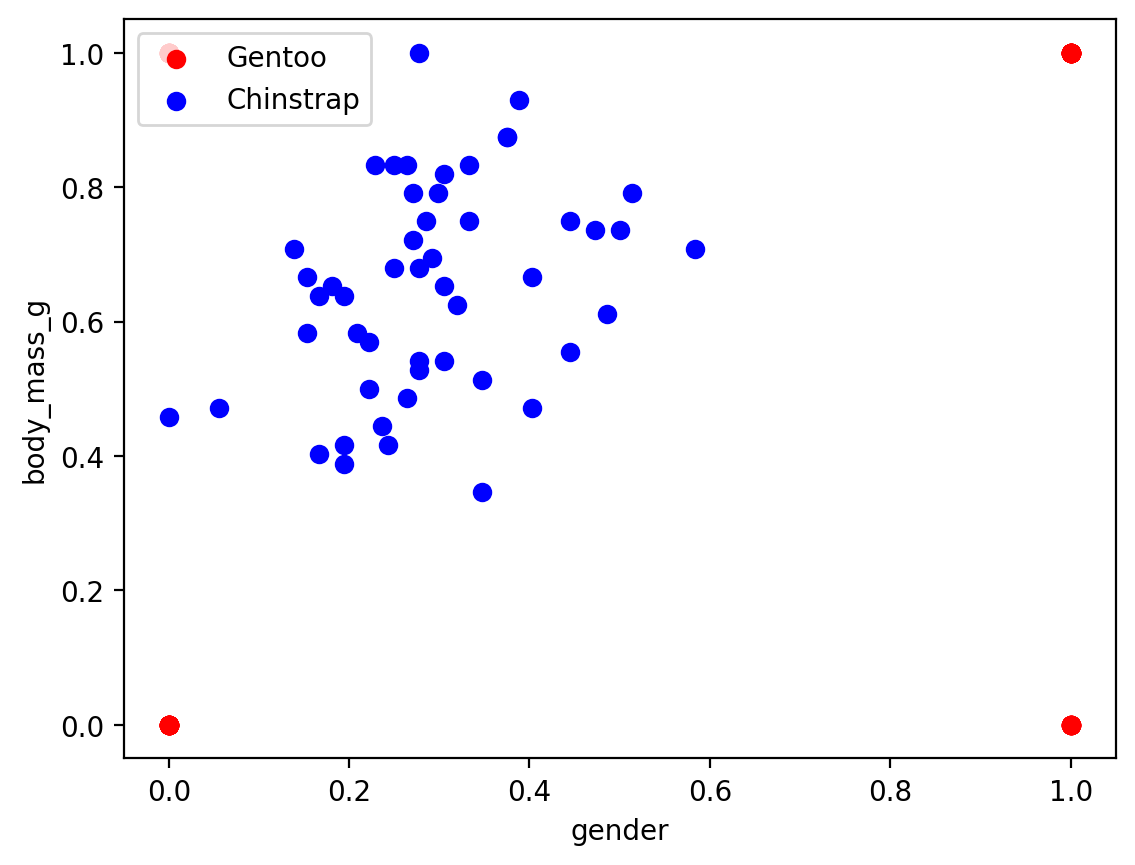
### flipper\_length\_mm , body\_mass\_g

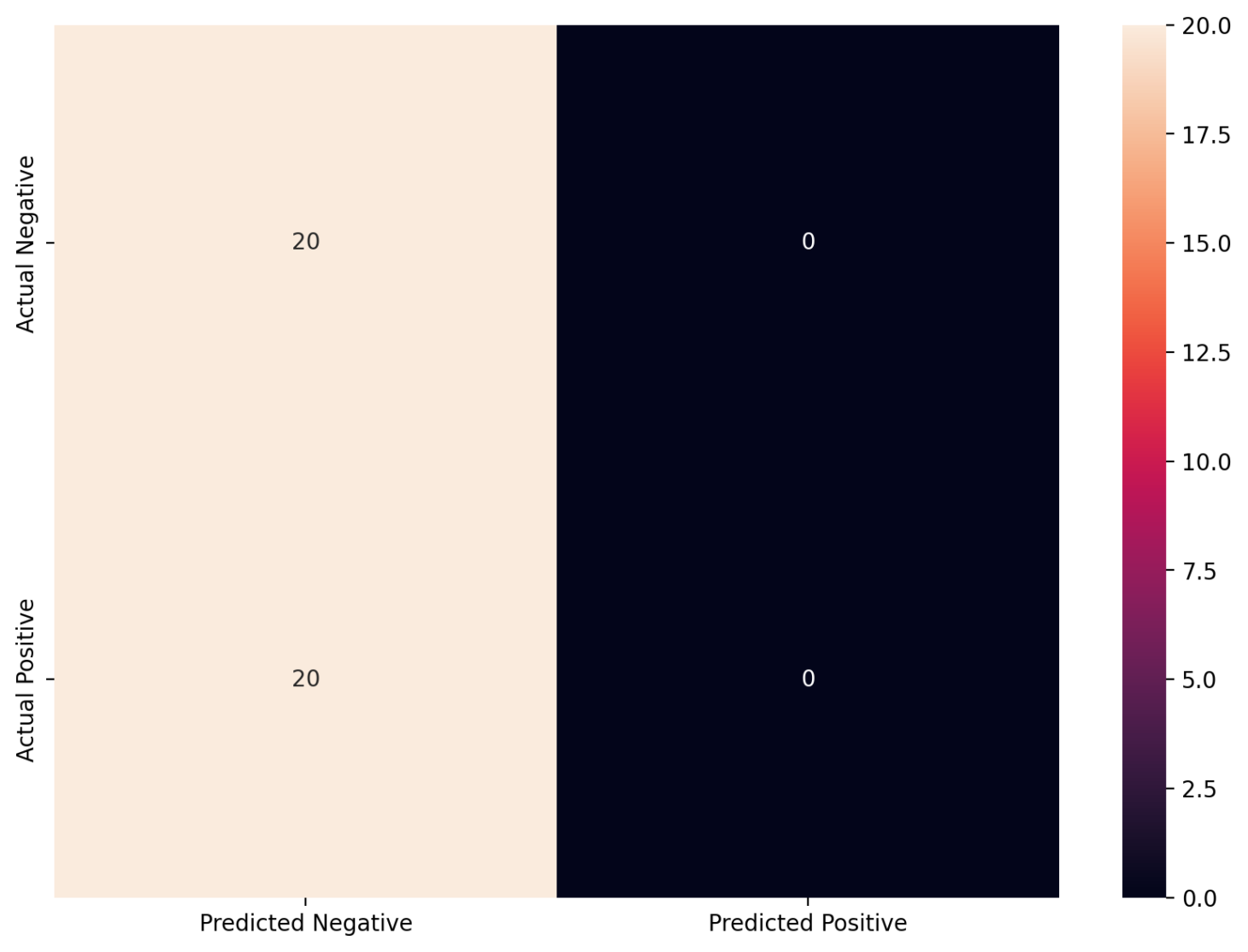




**Comment:**  test accuracy = 0.5

gender , body\_mass\_g





**Comment:** test accuracy = 0.5

# Overall comment:

* **the best features to classify between Adelie and Gentoo**
  + bill\_length\_mm , gender with test accuracy = 92.5%
* **The best Features to classify between Adelie and Chinstrap** 
  + No features are good enough to classify between them
* **The best Features to classify between Chinstrap and Gentoo**
  + flipper\_length\_mm , gender with test accuracy = 77.5%

# Note:

inorder to run the model

* streamlit have to be installed using pip install streamlit
* then run the model using streamlit run GUI.py from terminal