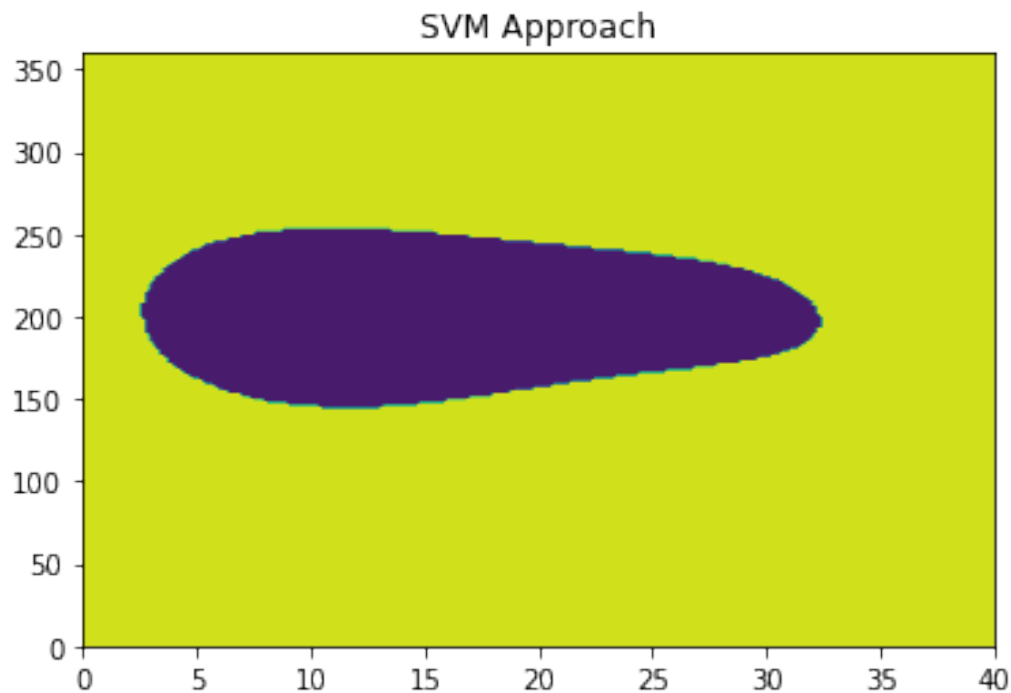


# JC8818

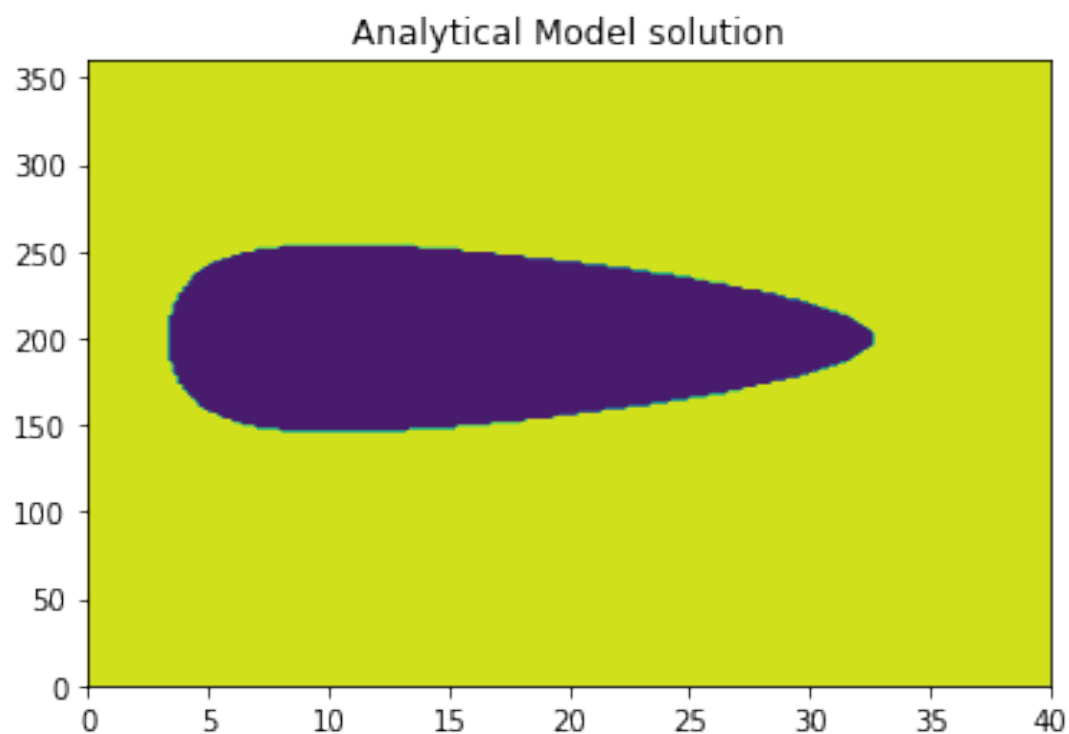
A.



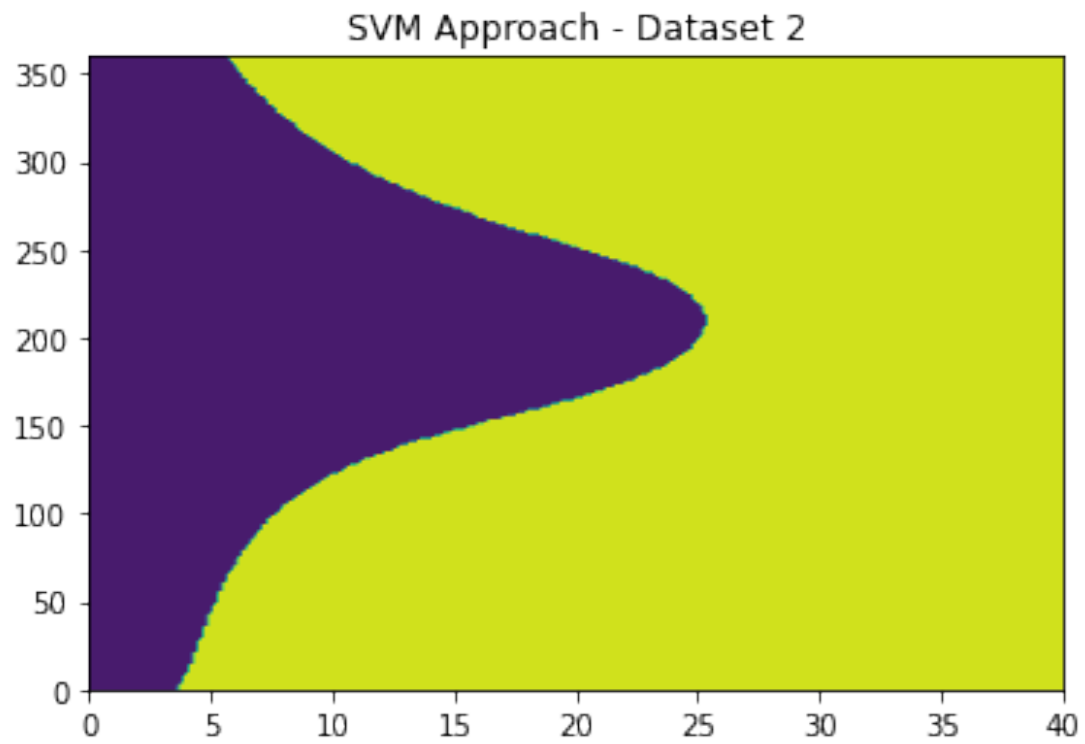
B.

1. SVM was chosen as it is the quicker solution, both computationally and time-wise.
2. ML is able to automate the prediction without the need for calculations.
3. ML is unnecessary when an understanding of the physics makes the analytical solution a suitable predictor. ML predictors would also show higher bias to training datasets than an analytical solution.

C.



D.



E. 4 features are varying now ( $f_1$ ,  $f_1\text{ang}$ ,  $f_2$ ,  $f_2\text{ang}$ ) and so a greater number of points are required to accurately fit the SVM for the range of  $f_1$  and  $f_1\text{ang}$ .