# **Assignment 5**

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### Task 1

Data option: Training Data Set

Result:

448

2

514

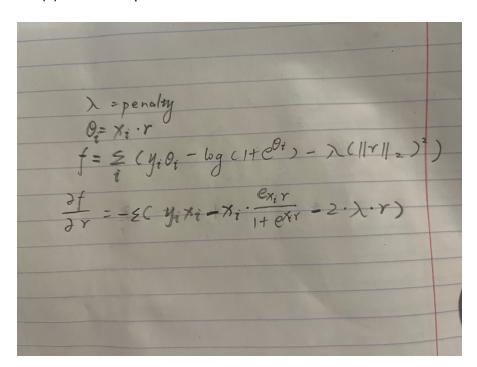
3167

652

### Task 2

<u>Data option: Small Data Set</u>

## (a) Gradient update formula



## (b) Fifty words with largest regression coefficients

fca satisfied pursuant applicant respondent relevantly clr pty alr tribunal submissions fcafc relevant relation circumstances affidavit interlocutory whether reasons proceeding jurisdictional honour appellant jj multicultural respondents gummow mr error consideration fmca respect ltd relied gaudron subsection notice proceedings delegate

hca

affidavits
leave
visa
costs
hearing
contravention
sought
conduct
fcr
solicitors

#### Task 3

<u>Data option: Small Data Set</u>

- (1) F1 score result: 0.87318635016
- (2) Cut off: 0.2
- (3) Potential reason of why my model was fooled:

Looking at these three false-positive context, they have many contents about the legal systems, therefore they have many words in common with our target category. For example, 'jurisdictional', 'proceeding'.

That might be one of the reasons why my classifier recognized them as 'positive'.