

Data Mining Homework 05

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1 Extract Code Features from AST

Solution. Please refer to code `task1/extractors/method_declaration_visitor.py`, `object_creation_visitor.py`, `method_invocation_visitor.py` for details.

The output is as follows.

```
1 python -m unittest my_tests.MyTest.test_get_class_name
2
3 .
4 -----
5 Ran 1 test in 0.046s
6
7 OK
```

2 Differentially Private Stochastic Gradient Descent

Solution. Please refer to the code `task2/model.py` for details.

The results are as follows.

| ACC@10 | MRR | NDCG@10 |
|--------|--------|---------|
| 0.7580 | 0.3172 | 0.4219 |

表 1: Results of Task 2

The evidence for model training is at `task2/output/202306111721/logs.txt`.