Report Phase 3

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Part 1:

The classifier is similar to 0/1 Loss given in the simulator.

By getting the error and predicted probability performance, the performance can be chosen to decide the classifier.

As run for test, the probability is decided to 0.51 finally to get the best result.

Part 2:

$ python simulate\_agents\_phase3.py

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SIMULATION RESULTS ON dataset1

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Wealth (the larger the better)

Agent\_bnb: $1,775,950.00

Agent\_lr: $1,638,100.00

Agent\_svc: $1,596,800.00

Agent\_xqiu12: $1,775,950.00

Log-loss (the smaller the better)

Agent\_bnb: 332.25

Agent\_lr: 373.89

Agent\_svc: 408.75

Agent\_xqiu12: 332.25

0/1 Loss (the smaller the better)

Agent\_bnb: 88

Agent\_lr: 115

Agent\_svc: 147

Agent\_xqiu12: 88

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SIMULATION RESULTS ON dataset2

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Wealth (the larger the better)

Agent\_bnb: $1,507,950.00

Agent\_lr: $1,717,100.00

Agent\_svc: $1,540,800.00

Agent\_xqiu12: $1,717,100.00

Log-loss (the smaller the better)

Agent\_bnb: 553.13

Agent\_lr: 487.71

Agent\_svc: 564.25

Agent\_xqiu12: 487.71

0/1 Loss (the smaller the better)

Agent\_bnb: 250

Agent\_lr: 223

Agent\_svc: 293

Agent\_xqiu12: 223

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SIMULATION RESULTS ON dataset3

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Wealth (the larger the better)

Agent\_bnb: $795,950.00

Agent\_lr: $810,100.00

Agent\_svc: $1,102,800.00

Agent\_xqiu12: $1,102,800.00

Log-loss (the smaller the better)

Agent\_bnb: 571.94

Agent\_lr: 566.91

Agent\_svc: 413.10

Agent\_xqiu12: 413.10

0/1 Loss (the smaller the better)

Agent\_bnb: 250

Agent\_lr: 255

Agent\_svc: 165

Agent\_xqiu12: 165