Weilin Lu

Assign-9

Linear\_Models

Q1

X=open price

Y=close price

|  |  |  |  |
| --- | --- | --- | --- |
|  | y=ax+b | y=ax^2+bx+c | y=ax^3+bx^2+cx+d |
| a | -0.299 | 3.067 | -10.3 |
| b | 116.533 | 12.851 | 6.5 |
| c |  | -264.356 | 12.851 |
| d |  |  | -144.192 |
|  |  |  |  |

Q2

Year 1 accuracy

|  |  |  |  |
| --- | --- | --- | --- |
| Week | d1 | d2 | d3 |
| 5 | 0.6 | 0.6 | 0.6 |
| 6 | 0.4 | 0.6 | 0.6 |
| 7 | 0.25 | 0.5 | 0.5 |
| 8 | 0.8 | 0.2 | 0.2 |
| 9 | 0.8 | 0.6 | 0 |
| 10 | 0.2 | 0.8 | 0.8 |
| 11 | 0.2 | 0.2 | 0.2 |
| 12 | 0.8 | 0.8 | 0.8 |
|  |  |  |  |

I choose:week 8,week 10 and week 12

Year 2, accuracy

|  |  |  |  |
| --- | --- | --- | --- |
| week | d1 | d2 | d3 |
| 8 | 0.4 | 0.4 | 0.4 |
| 10 | 0.4 | 0.4 | 0.4 |
| 12 | 0.6 | 0.6 | 0.6 |

Q3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | tp | tn | fp | fn | Accuracy |
| d1 | 7 | 0 | 8 | 0 | 47% |
| d2 | 7 | 0 | 8 | 0 | 47% |
| d3 | 7 | 0 | 8 | 0 | 47% |
| Q4 |  |  |  |  |  |

D1: Short position

D2: Short position

D3: Short position