F14106155 張言薰 HW11

執行結果:

C1 以 sin 函數為基底函數, C2 以 hat function 為基底函數

| (ipcvdl) (base) iris@Yen-Hsun-2 F14106155_numerical_hw11 % /Users/iris/library/CloudStorage/GoogleDrive-iriscdrive@gmail.com/我的雲端硬hw11/hw11.py | | | | | |
|--|------|--------------|-----------------|----------------|--------------|
| | х | (a) Shooting | (b) Finite-Diff | (c1) Var_sin | (c2) Var_hat |
| | 0.00 | 1.000000 | 1.000000 | 1.000000 | 1.000000 |
| | 0.10 | 1.016164 | 1.016532 | 1.075245 | 1.253583 |
| | 0.20 | 1.058516 | i 1.059102 | 1.160689 | 1.489071 |
| | 0.30 | 1.123616 | j 1.124251 | 1.254250 | 1.701852 |
| | 0.40 | 1.208203 | j 1.208890 | 1.354189 | 1.886751 |
| | 0.50 | 1.309558 | i 1.310313 | 1.458434 | 2.037858 |
| | 0.60 | 1.425592 | i 1.426194 | 1.565581 | 2.148342 |
| | 0.70 | 1.554272 | i 1.554570 | 1.674265 | 2.210211 |
| | 0.80 | 1.693662 | j 1.693822 | 1.783404 | 2.214017 |
| | 0.90 | 1.842561 | i 1.842642 | 1.892309 | 2.148479 |
| | 1 00 | 1 2 000000 | i 2 aaaaaa | i 2 aaaaaa | 2 000000 |

