

```
>> Computer_Assignment4_BoXiao
```

```
U1 =
```

```
1.0000  
1.0000  
1.0000  
1.0000  
1.0000  
1.0000  
1.0000  
1.0000  
1.0284  
1.0574  
1.0871  
1.1175  
1.1486  
1.1802  
1.0000  
1.0574  
1.1178  
1.1815  
1.2486  
1.3193  
1.3937  
1.0000  
1.0871  
1.1815  
1.2839  
1.3950  
1.5154  
1.6459  
1.0000  
1.1175  
1.2486  
1.3950  
1.5583  
1.7405  
1.9436  
1.0000  
1.1486  
1.3193  
1.5154  
1.7405  
1.9988  
2.2951  
1.0000  
1.1802  
1.3937
```

```
1.6459
1.9436
2.2951
2.7099
```

```
U2 =
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```
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0070
1.0140
1.0211
1.0282
1.0354
1.0426
1.0498
1.0571
1.0645
1.0719
1.0793
1.0867
1.0000
1.0140
1.0282
1.0426
1.0572
1.0720
1.0869
1.1021
1.1175
1.1331
1.1489
1.1649
1.1811
1.0000
1.0211
```

```
1.0426
1.0646
1.0870
1.1098
1.1332
1.1570
1.1813
1.2061
1.2315
1.2573
1.2836
1.0000
1.0282
1.0572
1.0870
1.1176
1.1490
1.1814
1.2146
1.2488
1.2839
1.3200
1.3570
1.3951
1.0000
1.0354
1.0720
1.1098
1.1490
1.1896
1.2316
1.2751
1.3201
1.3666
1.4148
1.4647
1.5163
1.0000
1.0426
1.0869
1.1332
1.1814
1.2316
1.2840
1.3386
1.3954
1.4547
1.5165
1.5809
```

```
1.6480
1.0000
1.0498
1.1021
1.1570
1.2146
1.2751
1.3386
1.4052
1.4751
1.5485
1.6255
1.7063
1.7911
1.0000
1.0571
1.1175
1.1813
1.2488
1.3201
1.3954
1.4751
1.5593
1.6483
1.7423
1.8417
1.9467
1.0000
1.0645
1.1331
1.2061
1.2839
1.3666
1.4547
1.5485
1.6483
1.7545
1.8675
1.9878
2.1158
1.0000
1.0719
1.1489
1.2315
1.3200
1.4148
1.5165
1.6255
1.7423
```

$$U3 =$$
[illegible]

```
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
1.0000
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1.0000
1.0000
1.0017
1.0035
1.0052
1.0070
1.0087
1.0105
1.0122
1.0140
1.0158
1.0175
1.0193
1.0211
1.0228
1.0246
1.0264
1.0282
1.0300
1.0317
1.0335
1.0353
1.0371
1.0389
1.0407
1.0425
1.0000
1.0035
1.0070
1.0105
1.0140
1.0175
1.0211
1.0246
1.0282
1.0318
1.0353
1.0389
1.0426
1.0462
```

```
1.0498
1.0535
1.0571
1.0608
1.0645
1.0682
1.0719
1.0756
1.0794
1.0831
1.0869
1.0000
1.0052
1.0105
1.0158
1.0211
1.0264
1.0318
1.0371
1.0426
1.0480
1.0535
1.0590
1.0645
1.0701
1.0756
1.0813
1.0869
1.0926
1.0983
1.1040
1.1098
1.1156
1.1214
1.1272
1.1331
1.0000
1.0070
1.0140
1.0211
1.0282
1.0353
1.0426
1.0498
1.0571
1.0645
1.0719
1.0794
1.0869
```

```
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1.1650
1.1731
1.1813
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1.0087
1.0175
1.0264
1.0353
1.0444
1.0535
1.0627
1.0719
1.0813
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1.1002
1.1098
1.1195
1.1292
1.1391
1.1490
1.1590
1.1691
1.1793
1.1896
1.1999
1.2104
1.2209
1.2315
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1.0211
1.0318
1.0426
1.0535
1.0645
1.0757
1.0869
1.0983
1.1098
1.1214
```



```
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1.1691
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1.0000
1.0122
1.0246
1.0371
1.0498
1.0627
1.0757
1.0888
1.1021
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1.1292
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1.1570
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1.3064
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1.0719
1.0869
1.1021
1.1175
1.1332
1.1490
```

```
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1.3573
1.3763
1.3955
1.0000
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1.0318
1.0480
1.0645
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1.0983
1.1156
1.1332
1.1510
1.1691
1.1875
1.2062
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1.2445
1.2641
1.2840
1.3042
1.3247
1.3456
1.3668
1.3883
1.4101
1.4323
1.4549
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1.0535
1.0719
1.0907
1.1098
1.1292
1.1490
1.1691
```

```
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1.0389
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1.3835
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1.5221
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1.0211
1.0426
1.0645
1.0869
1.1098
1.1332
1.1570
1.1814
```

1.2062  
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1.2840  
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1.3386  
1.3668  
1.3956  
1.4249  
1.4549  
1.4855  
1.5168  
1.5487  
1.5813  
1.6146  
1.6485  
1.0000  
1.0228  
1.0462  
1.0701  
1.0945  
1.1195  
1.1450  
1.1712  
1.1979  
1.2252  
1.2532  
1.2818  
1.3110  
1.3410  
1.3716  
1.4029  
1.4349  
1.4676  
1.5011  
1.5354  
1.5704  
1.6062  
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1.7187  
1.0000  
1.0246  
1.0498  
1.0756  
1.1021  
1.1292  
1.1570  
1.1855

1.2146  
1.2445  
1.2751  
1.3065  
1.3386  
1.3716  
1.4053  
1.4399  
1.4753  
1.5116  
1.5487  
1.5868  
1.6259  
1.6658  
1.7068  
1.7488  
1.7918  
1.0000  
1.0264  
1.0535  
1.0813  
1.1098  
1.1391  
1.1691  
1.2000  
1.2316  
1.2641  
1.2975  
1.3317  
1.3668  
1.4029  
1.4399  
1.4778  
1.5168  
1.5568  
1.5979  
1.6400  
1.6833  
1.7277  
1.7732  
1.8200  
1.8680  
1.0000  
1.0282  
1.0571  
1.0869  
1.1175  
1.1490  
1.1814

```
1.2146
1.2488
1.2840
1.3202
1.3573
1.3956
1.4349
1.4753
1.5168
1.5595
1.6035
1.6486
1.6950
1.7428
1.7918
1.8423
1.8941
1.9475
1.0000
1.0300
1.0608
1.0926
1.1253
1.1590
1.1937
1.2295
1.2663
1.3042
1.3433
1.3835
1.4249
1.4676
1.5116
1.5568
1.6035
1.6515
1.7009
1.7519
1.8043
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1.9140
1.9713
2.0303
1.0000
1.0317
1.0645
1.0983
1.1331
1.1691
```

```
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1.2840
1.3247
1.3668
1.4102
1.4549
1.5011
1.5487
1.5979
1.6486
1.7009
1.7549
1.8106
1.8681
1.9273
1.9885
2.0516
2.1167
1.0000
1.0335
1.0682
1.1040
1.1410
1.1793
1.2188
1.2597
1.3019
1.3456
1.3907
1.4373
1.4855
1.5354
1.5868
1.6400
1.6950
1.7519
1.8106
1.8713
1.9340
1.9989
2.0659
2.1352
2.2067
1.0000
1.0353
1.0719
1.1098
1.1490
```

```
1.1896
1.2316
1.2751
1.3201
1.3668
1.4151
1.4650
1.5168
1.5704
1.6259
1.6833
1.7428
1.8043
1.8681
1.9340
2.0024
2.0731
2.1463
2.2221
2.3006
1.0000
1.0371
1.0756
1.1156
1.1570
1.1999
1.2445
1.2907
1.3386
1.3883
1.4398
1.4933
1.5487
1.6062
1.6658
1.7277
1.7918
1.8583
1.9273
1.9989
2.0731
2.1500
2.2299
2.3126
2.3985
1.0000
1.0389
1.0794
1.1214
```



```
1.1650
1.2104
1.2575
1.3064
1.3573
1.4101
1.4650
1.5221
1.5813
1.6429
1.7068
1.7732
1.8423
1.9140
1.9885
2.0659
2.1463
2.2299
2.3166
2.4068
2.5005
1.0000
1.0407
1.0831
1.1272
1.1731
1.2209
1.2706
1.3224
1.3763
1.4323
1.4907
1.5514
1.6146
1.6803
1.7488
1.8200
1.8941
1.9713
2.0516
2.1352
2.2221
2.3126
2.4068
2.5048
2.6069
1.0000
1.0425
1.0869
```

```
1.1331  
1.1813  
1.2315  
1.2839  
1.3385  
1.3955  
1.4549  
1.5167  
1.5813  
1.6485  
1.7187  
1.7918  
1.8680  
1.9475  
2.0303  
2.1167  
2.2067  
2.3006  
2.3985  
2.5005  
2.6069  
2.7177
```

```
rate_of_convergence =
```

```
1.8457
```

```
>>
```





