第一題

t	Exact	Euler	Euler Error	Taylor	Taylor Error
1.0	0.000000	0.000000	0.000000	0.000000	0.000000
1.1	0.105160	0.100000	0.005160	0.105000	0.000160
1.2	0.221243	0.209917	0.011325	0.220919	0.000324
1.3	0.349121	0.330471	0.018651	0.348612	0.000509
1.4	0.489682	0.462354	0.027328	0.488954	0.000728
1.5	0.643875	0.606285	0.037590	0.642883	0.000993
1.6	0.812753	0.763041	0.049711	0.811438	0.001315
1.7	0.997494	0.933475	0.064019	0.995787	0.001707
1.8	1.199439	1.118537	0.080902	1.197252	0.002187
1.9	1.420116	1.319293	0.100823	1.417344	0.002772
2.0	1.661282	1.536943	0.124338	1.657795	0.003487

第二題

```
步長 h = 0.05:
t = 0.0:
  數值解: u1 = 1.333333, u2 = -0.666667
  精確解: u1 = 1.333333, u2 = 0.666667
  誤差:    u1 = 0.000000, u2 = 1.333333
t = 0.5:
  數值解: u1 = 0.630794, u2 = -0.449730
  精確解: u1 = 0.738788, u2 = -0.515658
  誤差:    u1 = 0.107994, u2 = 0.065928
t = 1.0:
  數值解: u1 = 0.307225, u2 = -0.237293
  精確解: u1 = 0.279675, u2 = -0.229888
  誤差:    u1 = 0.027550, u2 = 0.007405

步長 h = 0.1:
t = 0.0:
  數值解: u1 = 1.333333, u2 = -0.666667
  精確解: u1 = 1.333333, u2 = 0.666667
  誤差:    u1 = 0.000000, u2 = 1.333333
t = 0.5:
  數值解: u1 = -346.402403, u2 = 712.725642
  精確解: u1 = 0.738788, u2 = -0.515658
  誤差:    u1 = 347.141191, u2 = 713.241300
t = 1.0:
  數值解: u1 = -1300265.083415, u2 = 2672128.044580
  精確解: u1 = 0.279675, u2 = -0.229888
  誤差:    u1 = 1300265.363090, u2 = 2672128.274467
```