第一题:

第1題

	t	Exact Value	Euler Value	Euler Relative Error	Taylor 2nd Value	Taylor 2nd Relative Error
0	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	1.100000	0.105160	0.100000	0.049066	0.105000	0.001520
2	1.200000	0.221243	0.209917	0.051190	0.220919	0.001463
3	1.300000	0.349121	0.330471	0.053421	0.348612	0.001457
4	1.400000	0.489682	0.462354	0.055808	0.488954	0.001486
5	1.500000	0.643875	0.606285	0.058381	0.642883	0.001542
6	1.600000	0.812753	0.763041	0.061164	0.811438	0.001617
7	1.700000	0.997494	0.933475	0.064180	0.995787	0.001712
8	1.800000	1.199439	1.118537	0.067450	1.197252	0.001823
9	1.900000	1.420116	1.319293	0.070996	1.417344	0.001952
10	2.000000	1.661282	1.536943	0.074845	1.657795	0.002099

第二题 h=0.1:

第2題 h=0.1

	t	u1 (Exact)	u1 (RK4)	u1 Relative Error	u2 (Exact)	u2 (RK4)	u2 Relative Error
0	0.000000	1.333333	1.333333	0.000000	0.666667	0.666667	0.000000
1	0.100000	1.793063	-3.052437	2.702359	-1.032002	8.989305	9.710546
2	0.200000	1.423902	-23.847795	17.748195	-0.874681	51.192704	59.527283
3	0.300000	1.131577	-130.165202	116.029960	-0.724999	269.269193	372.406517
4	0.400000	0.909409	-680.231485	748.993250	-0.608214	1399.368584	2301.782465
5	0.500000	0.738788	-3531.299585	4780.856145	-0.515658	7258.241839	14076.698288
6	0.600000	0.605710	-18312.795052	30234.619544	-0.440411	37634.955483	85455.214395
7	0.700000	0.499860	-94951.331907	189956.755587	-0.377404	195131.871735	517038.346525
8	0.800000	0.413671	-492306.465639	1190091.431107	-0.322954	1011721.872078	3132717.628867
9	0.900000	0.341614	-2552513.623867	7471916.734936	-0.274409	5245578.826590	19115926.393205
10	1.000000	0.279675	-13234278.789168	47320223.642809	-0.229888	27197287.206587	118306769.912275

第二题 h=0.05:

第2題 h=0.05

	t	u1 (Exact)	u1 (RK4)	u1 Relative Error	u2 (Exact)	u2 (RK4)	u2 Relative Error
0	0.000000	1.333333	1.333333	0.000000	0.666667	0.666667	0.000000
1	0.050000	1.912059	1.721880	0.099463	-0.909077	-0.499599	0.450432
2	0.100000	1.793063	1.726915	0.036891	-1.032002	-0.832598	0.193221
3	0.150000	1.601967	1.617161	0.009485	-0.961459	-0.890373	0.073935
4	0.200000	1.423902	1.481687	0.040582	-0.874681	-0.861042	0.015593
5	0.250000	1.267646	1.348945	0.064134	-0.795221	-0.807505	0.015447
6	0.300000	1.131577	1.227063	0.084384	-0.724999	-0.750341	0.034955
7	0.350000	1.012999	1.117478	0.103139	-0.663060	-0.695886	0.049507
8	0.400000	0.909409	1.019525	0.121086	-0.608214	-0.645732	0.061685
9	0.450000	0.818630	0.931977	0.138460	-0.559389	-0.599934	0.072481
10	0.500000	0.738788	0.853541	0.155326	-0.515658	-0.558092	0.082293
11	0.550000	0.668275	0.783017	0.171700	-0.476225	-0.519706	0.091305
12	0.600000	0.605710	0.719337	0.187594	-0.440411	-0.484290	0.099633
13	0.650000	0.549909	0.661560	0.203035	-0.407635	-0.451407	0.107380
14	0.700000	0.499860	0.608868	0.218076	-0.377404	-0.420673	0.114649
15	0.750000	0.454695	0.560547	0.232798	-0.349296	-0.391754	0.121555
16	0.800000	0.413671	0.515980	0.247318	-0.322954	-0.364365	0.128226
17	0.850000	0.376158	0.474633	0.261791	-0.298076	-0.338259	0.134806
18	0.900000	0.341614	0.436043	0.276418	-0.274409	-0.313226	0.141458
19	0.950000	0.309583	0.399812	0.291454	-0.251739	-0.289089	0.148370
20	1.000000	0.279675	0.365600	0.307231	-0.229888	-0.265698	0.155772