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COMPUTER ENGINEERING.
10/02/045

i	t	y	y'
1	0	1.4	1.96
2	0.1	1.596	2.747216
3	0.2	1.870721	3.899599
4	0.3	2.2606815	5.710681
5	0.4	2.83175	8.818806
6	0.5	3.713630	14.791049

$$y_1 = 1.4$$

$$y'_1 = 2t + y^2$$

$$y'_1 = 2 \times 0 + (1.4)^2$$

$$y'_1 = 0 + 1.96$$

$$y'_1 = 1.96$$

$$h = \text{stepsize} = 0.1$$

$$y_2 = y_1 + h y'_1$$

$$y_2 = 1.4 + 0.1 \times 1.96$$

$$y_2 = 1.4 + 0.196$$

$$y_2 = 1.596$$

$$y'_2 = 2t + y^2$$

$$y'_2 = 2 \times 0.1 + (1.596)^2$$

$$y'_2 = 0.2 + 2.547216$$

$$y'_2 = 2.747216$$

$$y_3 = y_2 + h y'_2$$

$$y_3 = 1.596 + 0.1 \times 2.747216$$

$$y_3 = 1.596 + 0.2747216$$

$$y_3 = 1.8707216$$

$$y'_3 = 2 \times 0.2 + (1.8707216)^2$$

$$y'_3 = 0.4 + 3.4996$$

$$y'_3 = 3.899599$$

16/RNG02/045

$$y_4 = y_3 + h y'_3$$

$$y_4 = 1.8707216 + 0.1 \times 3.879599$$

$$y_4 = 1.8707216 + 0.3879599$$

$$y_4 = 2.2606815$$

$$y'_4 = 2 + y^2$$

$$y'_4 = 2 \times 0.3 + (2.2606815)^2$$

$$y'_4 = 0.6 + 5.110080$$

$$y'_4 = 5.710681$$

$$y_5 = y_4 + h y'_4$$

$$y_5 = 2.2606815 + 0.1 \times 5.710681$$

$$y_5 = 2.2606815 + 0.5710681$$

$$y_5 = 2.83175$$

$$y'_5 = 2 + y^2$$

$$y'_5 = 2 \times 0.4 + (2.83175)^2$$

$$y'_5 = 0.8 + 8.01880$$

$$y'_5 = 8.818806$$

$$y_6 = y_5 + h y'_5$$

$$y_6 = 2.83125 + 0.1 \times 8.818806$$

$$y_6 = 2.83125 + 0.8818806$$

$$y_6 = 3.713630$$

$$y'_6 = 2 + y^2$$

$$y'_6 = 2 \times 0.5 + (3.71360)^3$$

$$y'_6 = 14.791049$$

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