Задача 6

Метод Рунге — Кутты

h = 0.1

y(0) = 0.5

z(0) = 1

x(0) = 0

;

;

;

;

;

;

Вывод программы

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| Iteration | X | Y | Z |

+-----------+-----+-------------+-------------+

| 0 | 0.0 | 0.500000000 | 1.000000000 |

| 1 | 0.1 | 0.536683796 | 1.196458558 |

| 2 | 0.2 | 0.590484818 | 1.430185165 |

| 3 | 0.3 | 0.663974226 | 1.714204352 |

| 4 | 0.4 | 0.760348185 | 2.066731068 |

| 5 | 0.5 | 0.882184969 | 2.513257392 |

| 6 | 0.6 | 1.030710973 | 3.088615980 |

| 7 | 0.7 | 1.206211532 | 3.839074168 |

| 8 | 0.8 | 1.408711534 | 4.824785908 |

| 9 | 0.9 | 1.638211534 | 6.122688782 |

| 10 | 1.0 | 1.894711534 | 7.829760002 |

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