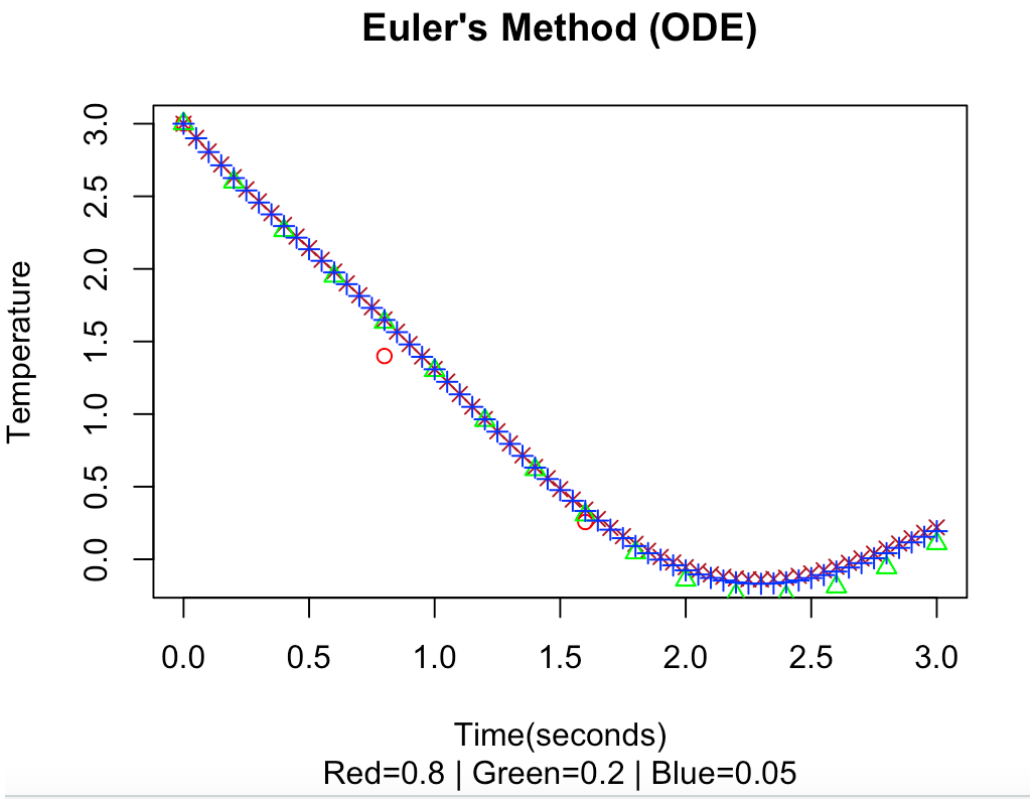
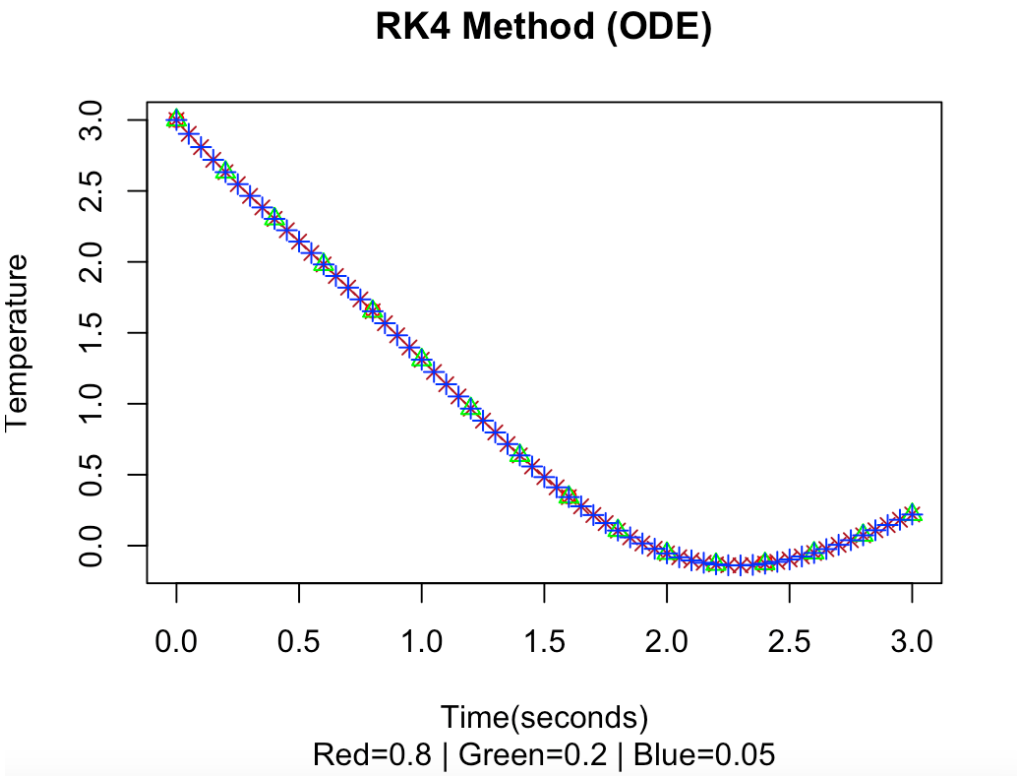

Euler's Method (ODE)
Temperature
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Time(seconds)
Red=0.8 | Green=0.2 | Blue=0.05


RK4 Method (ODE)
Temperature
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Time(seconds)
Red=0.8 | Green=0.2 | Blue=0.05

- Questions A:
  - Which method has the highest accuracy?
    - RK4 Method
  - Which values for h have the highest accuracy?
    - H = 0.05
  - What evidence exists to support your choices for the previous questions?
    - The method using the 0.05 has the highest accuracy as it provides more points to define the curve.
- Questions B:
  - What is a differential equation?
    - A differential equation is an equation when there is change (steps) in the equation as you move forward using x / y points.
  - What makes an ordinary differential equation, ordinary?
    - An ODE is a type of differential equation that uses ordinary derivatives instead of partial derivatives.
  - What is the purpose of the Runge-Kutta methods of numerical analysis?
    - Runge-Kutta methods generate an accurate solution without the need to calculate higher order derivatives.