LAB-8: Solution of ODE of first order and first degree by Runge Kutta fourth order method and Milne's predictor and corrector method.

1. Write a python program to apply the Runge Kutta method to find the solution of $\frac{dy}{dx} = 1 + \left(\frac{y}{x}\right)$ at $y(2)$ taking $h = 0.2$. Given that $y(1) = 2$.
2. Write a python program to apply Milne's predictor and corrector method to solve $\frac{dy}{dx} = x^2 + \left(\frac{y}{2}\right)$ at $y(1.4)$. Given that $y(1) = 2, y(1.1) = 2.2156, y(1.2) = 2.4649, y(1.3) = 2.7514$. Use corrector formula thrice.