Runge kutta method

```c
#include <stdio.h>

// Function to calculate the value of dy/dx
double derivative(double x, double y) {
    return x * x + y;
}

// Function to solve ODE using RK4 method
void rungeKutta4(double x0, double y0, double h, double xn) {
    double x = x0;
    double y = y0;
    double k1, k2, k3, k4;

    while (x < xn) {
        printf("x = %.2lf, y = %.6lf\n", x, y);

        k1 = h * derivative(x, y);
        k2 = h * derivative(x + h/2, y + k1/2);
        k3 = h * derivative(x + h/2, y + k2/2);
        k4 = h * derivative(x + h, y + k3);

        y = y + (k1 + 2*k2 + 2*k3 + k4) / 6.0;
        x = x + h;
    }
}

int main() {
    double x0, y0, h, xn;

    printf("Enter the initial value of x: ");
    scanf("%lf", &x0);

    printf("Enter the initial value of y: ");
    scanf("%lf", &y0);

    printf("Enter the step size (h): ");
    scanf("%lf", &h);

    printf("Enter the final value of x: ");
    scanf("%lf", &xn);

    printf("Solving ODE using Runge-Kutta 4 method:\n");
    rungeKutta4(x0, y0, h, xn);

    return 0;
}
```