```c
// C-Program for finding the Zero's of a function using Newton-Raphson method.

#include <stdio.h>
#include <math.h>

int main(){
    //Variables
    int n, i; float x1, y1, dy1, x2, y2, dy2, e, er, eder;

    //Inputs
    printf("Enter the maximum number of iterations : ");
    scanf("%d", &n);
    printf("Enter Initial guess(x1) : ");
    scanf("%f", &x1);
    printf("Enter allowed in the solution(e) : ");
    scanf("%f", &e);
    printf("Enter minimum limit to the derivative : ");
    scanf("%f", &eder);

    //Calculation using for loop.
    for(i=1;i<=n;i++){
        y1 = x1*x1-2;
        dy1 = 2*x1;

        x2 = x1-(y1/dy1);
        er = (x2-x1)*(x2-x1);

        y2 = x2*x2-2;
        dy2 = 2*x2;

        //Output-1
        printf("\ni = %d\nx1 = %f, x2 = %f\nf'(x1) = %f, f'(x2) = %f\n",i,x1,x2,y1,y2);

        x1 = x2;
        dy2 = dy2*dy2;
        dy2 = sqrt(dy2);

        if (dy2 <= eder){
            //Output-2
            printf("\nDerivative is small, x = %f, f(x) = %f, f'(x) = %f", x2, y2, dy2);
            goto out;
        }

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44:         if (sqrt(er) <= e){
45:             //Output-3
46:             printf("\nThe solution is : x = %f, f(x) = %f\n",x2, y2);
47:             printf("The number of iteration is : i = %d", i);
48:             goto out;
49:         }
50:     }
51:     //Output-4
52:     printf("Solution does not found in n iterations.");
53:     out:
54:     return 0;
55: }
```