```c
//****************************************************
//Program for implementation of Modified Newton-Raphson Method
//Coded by Ashwini K. Singh on 01-Feb-2021
//****************************************************

#include<stdio.h>    // Inclusion of the input-output header file
#include<math.h>     // Inclusion of the math header file

//*******EVALUATION OF THE FUNCTION
float f(float x)
{
    return ((x*x*x)-x-1);
}
//*******END OF FUNCTION f


//*************STARTING MAIN FUNCTION*********
int main(void)
{
    int i, N;                                    //Variable declaration
    float h, x0, x1, e, df;                      //Variable
declaration

    printf("\nF(x) = ((x*x*x)-x-1)\n");

    FILE *input, *output;
    input=fopen("inModifiedNewtonRaphson.txt","r");
    output=fopen("outModifiedNewtonRaphson.tsv","w");

    // Reading inputs from the input file
    fscanf(input,"%f,%f,%d", &x0, &e, &N);

    // Displaying inputs read from the input file on the console
    printf("\nValues of x0, allowed error and max iterations read from
'inModifiedNewtonRaphson.txt' are: %f, %f\n, %d\n",x0,e,N);
    // Writing the column-headers in the output file
    fprintf(output,"Iteration\tx0\tx1\n");
    printf("\nItr\tx0\t\tf(x0)\t\tdf\t\th\t\tx1\n\n");

    //Calculation of df(x0)
    df=(3*x0*x0)-1;
    for (i=1; i<=N; i++)
    {
        h=f(x0)/df;
        x1=x0-h;
        fprintf(output,"%3d\t%9.6f\t%9.6f\n", i, x0, x1);   // Writing
the outputs in the output file

printf("%3d\t%9.6f\t%9.6f\t%9.6f\t%9.6f\t%9.6f\n",i,x0,f(x0),df,h,x1);
        if (fabs(h) < e)
        {
            printf("\nAfter %3d iterations, root = %8.6f\n", i, x1);
// Displaying the final output on console
            return 0;
        }
        x0=x1;
    }
    printf("\nThe required solution does not converge or iterations are
insufficient\n");
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    return 1;
}
//*****************END OF MAIN FUNCTION**********
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