Name : Deepankar Sharma
Course: BCA
University Roll No: 2092014
Student Id : 20041299
Semester: 3
Date: September 11, 2021

Practical No:01 Types of Errors

Objective: To find Absolute Error, Relative Error and Percentage Error.

2. Algorithm:

1. START.
2. READ VALUES OF 'TV' AS TRUE VALUE AND 'AV' AS APPROX VALUE.
3. CALCULATE EA= [TV-AV] , HERE EA REFERS TO ABSOLUTE ERROR AND [] REFERS TO MODULUS SIGN.
4. CALCULATE ER=EA/TV , ER REFERS TO RELATIVE ERROR.
5. CALCULATE EP=ER*100 , EP REFERS TO PERCENTAGE ERROR.
6. DISPLAY ALL THE RESULTS.
   STOP.

3. Code :

```c
#include <stdio.h>
#include <math.h>
int main()
{
    float tv, av, ea, er, ep;
    printf("enter true value: ", tv);
    scanf("%f", &tv);
    printf("enter approx value: ", av);
    scanf("%f", &av);
    ea = fabs(tv - av);
    er = ea / tv;
    ep = er * 100;
    printf("absolute error is = %.3f \n", ea);
    printf("relative error is = %.3f \n", er);
    printf("percentage error is = %.3f % \n", ep);
    return 0;
}
```

4. Output:

enter true value: 8.6789
enter approx value: 8.68
absolute error is = 0.001
relative error is = 0.000
percentage error is = 0.013