

I want a program in c language using file handling concept that read the input from the p.txt file where actual effort and estimated error is written of five projects like

Project ID	actual effort (AE)	estimated effort (EE)
A	2580	1507
B	3045	1325
C	3693	1661
D	1205	1072
E	3501	3231

Calculate the value of MRE and MER for each individual project and using obtained value of MMRE and MMER calculate the MMRE, MMER, MSE, MMSE and PRED(x) for each value of x like x= 15,20,55,60 using the formulas given below-

$$MRE = \frac{|ActEffort - EstEffort|}{ActEffort}, \quad MMRE = \frac{1}{N} \sum_{i=1}^N MRE_i$$

$$MSE = \frac{\sum_{i=1}^N (Actual\_Effort_i - Estimated\_Effort_i)^2}{N}$$

$$RMSE = \sqrt{\frac{1}{n} \sum_{i=1}^n (Actual\ Value - Predicted\ Value)^2}$$

$$MER_i = \frac{|Actual\ Effort_i - Predicted\ Effort_i|}{Predicted\ Effort_i}, \quad MMER = \frac{1}{N} \sum_{i=1}^N MER_i$$

- **PRED (x):** PRED (x) is the percentage of projects for which estimated value falls within x %.

$$PRED(x) = \frac{k}{n}$$

Where, n = total number of projects

x = selected range of maximum MMRE

k = number projects in a set of n projects whose MMRE <= x

