Answer on Question #45474, Programming, Mat LAB | Mathematica | MathCAD | Maple

Question:

Write a single program in Matlab that calculates the arithmetic mean (average), rms average, geometric mean and harmonic mean for a set of n positive numbers. Your program should take two values xlow and xhigh and generate 10000 random numbers in the range [xlow…xhigh], and should print out arithmetic mean (average), rms average, geometric mean and harmonic mean.

Answer:

```
function [arithmetic_mean, rms_average, geometric_mean, harmonic_mean] =
program (xlow, xhigh)

    random_array = random('unif', xlow, xhigh, 100000, 1);

    arithmetic_mean = mean(random_array)

    rms_average = rms(random_array)

    geometric_mean = geomean(random_array)

    harmonic_mean = harmmean(random_array)

end
```