

Methods of Computational Physics - 2022, Assignment No. 01

(Date: 20 July, 2022; Due Date: July 27, 2022)

Q1 Write a program to find the probability distribution for a set of n real numbers. The input to the program should be n , the minimum value x_{\min} , the maximum value x_{\max} and the bin width Δx . Use this program to find the distribution for the data given in the file `asgn01_input.dat`. There are $n = 100000$ values in this file. Use $\Delta x = 0.1, x_{\min} = -1.0, x_{\max} = 1.0$. Plot $\rho(x)$ Vs x . (Print only the program and the plot, not output file.)

Experiment by varying the bin width Δx and observe the change in the nature of the above plot.