SRS

Lab-Thursday
Group-16
Slot-11a
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Introduction

The following are freatures of the 2D Graph Plotter(for Purely Mathematical and Statistical Purposes) required:-

1.Under Non Statistical Freatures

1.a :Plot of Variours Standard mathematical function's graph(1 variable real valued function's graph) like sin(x),cos(x),cot(x),sec(x),tan(x),log(x),exp(x),abs(x),sqrt(x),x^a,a^x

And various compositions of these functions.

1.b:Choise of the interval where user wants the plot to be done.

1.c:Choice of Unit is also provided so as zoom in to look into the qualitative feature of function in more detailed way.

1.d:Drawing of Tangent line of a curve of a function at specified point given by user is also possible in this software application.
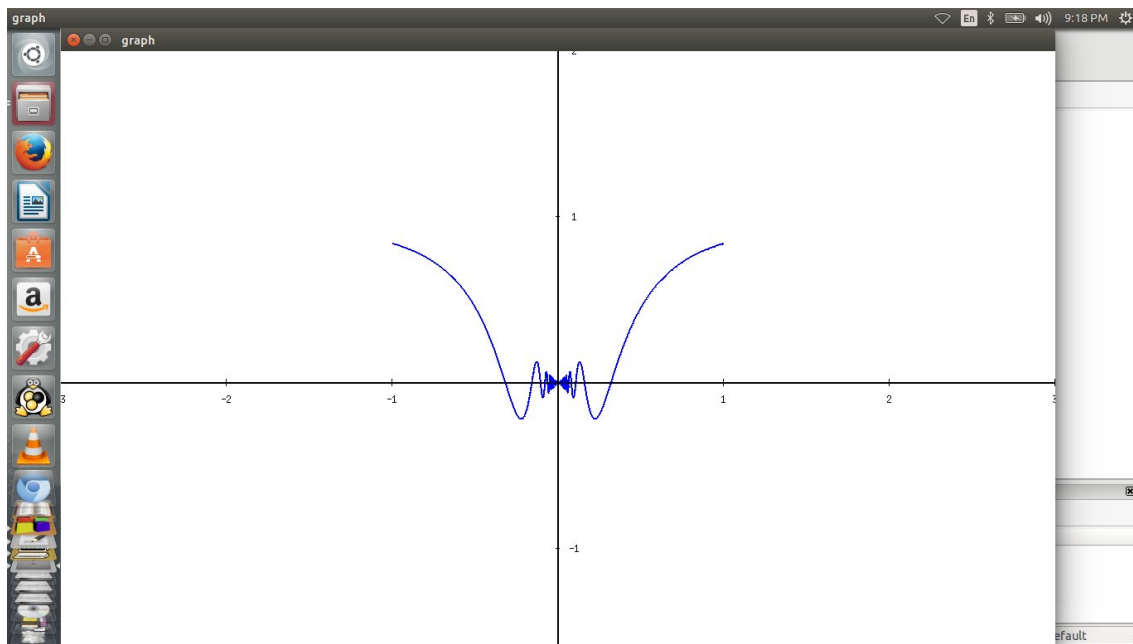
2. Statistical Freatures

2.a:Calculation of Mean ,Sample Variance,Standard Deviation,Line of Regression,cooefficient of co-relation.

Is done by this application on providing data (X,Y) by user

2.b:User are provided with the facility of getting the curve of standard statistical continuous distribution on providing with the required parameters(even this application checks on the fact that wheather the parameters respective to a distribution is valid).

2.c:User can use this software application for getting line of Regression X on Y or Y on X by providing data (X,Y) and also has facility of getting its plot on canvas.

Sample Outputs:

Use of Headear files:

1.fparser :(a)For parsing function given by user on console screen.

(b) usage of fparser.Eval() for the evaluation of value of points.

2.simplecpp:For Graphical Purposes.

3.string.