**PROJECT**

**NUMERICAL ANALYSIS**

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**Date: 08-05-2018**

# NUMERICAL ANAYLISIS LAB PROJECT:

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## SPEECH RECOGINITION SYSTEM

### INTRODUCTION:

In this lab project we are designing a security system which works on voice recognitions, trending now a days. This security system is most renowned system in almost all type of security systems. It ensures that the user can only access to his system. It erase all the accessibility issues. In numerical analysis as we are concerned about mathematical operations and there effect on almost all types of fields of science so in this project we are strictly ensuring that the things are related to mathematical computation we are doing analysis for voice recognition we are comparing frequencies and voice pitch to calculate the resemblance in a voice.

### WORKING:

In its computation we are using some built in functions, some frequency and pitch resemblance. We are plotting a graph between two voices which shows how a voice resemble with another voice which is the main purpose of our project. The graph linearity shows how the two voice are same when two voices have so much same things like frequency and pitch then plot will have a linear line that would represent the frequency and pitch resemblance that is to be calculated by a built in tool or operator of mat lab which does voice resemblance up to some extent after some mathematical calculation.

### SCOPE:

Its scope is so vast. In any type of security systems we are using this technique everywhere. We are implementing this because it is a hot topic in the world of security which is totally depending on science now a days.