

**Annexure-I**

**Title of the work: Statistical Analysis on Disable Data**

Data Science Project Report  
(Project Semester August-December 2021)

**Submitted by**

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**Section: KM007**

**Course Code: INT217**

**Under the Guidance of**

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**PHAGWARA, PUNJAB**



## **CERTIFICATE**

This is to certify that Parisa Vinay bearing Registration no. 11901947 has completed Data Science project titled, “Statistical Analysis on Disable Data” under my guidance and supervision. To the best of my knowledge, the present work is the result of his/her original development, effort and study.

Signature and Name of the Supervisor

Designation of the Supervisor

School of Computer Science

Lovely Professional University

Phagwara, Punjab.

Date:

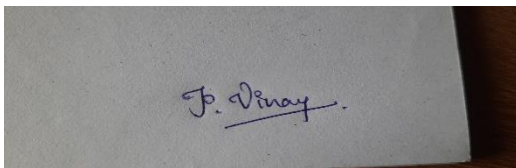
### **DECLARATION**

I, Parisa Vinay, student of Lovely Professional University under CSE/IT Discipline at, Lovely Professional University, Punjab, hereby declare that all the information furnished in this assignment is based on my own intensive work and is genuine.

**Name of the Student:** Parisa Vinay

**Date:** 15-12-2021

**Signature:**

A photograph of a piece of white paper with a handwritten signature in blue ink. The signature appears to be 'P. Vinay' with a horizontal line underneath the name.

**Registration No:** 11901947

## **ACKNOWLEDGEMENT**

A project work is a combination of views, ideas, suggestions and contribution of many people. Thus, one of the pleasant parts of writing the report is to thank those who have contributed towards its fulfilment.

I consider it as great privilege to have esteemed Lecturer Ms. Sandeep Kaur as my project guide. I take this opportunity to express my sincere gratitude to her through constant advice and constructive criticism nourished my interest in the subject and provided a free and pleasant atmosphere to work against all odd situations. I avail this opportunity to extend my heart full thanks and deep respect to faculty member for their able guidance during this project.

My gratitude to all those, who responded to my questionnaire in a well-defined manner and helped me acquiring knowledge.

I would like to communicate a deep sense of gratitude to all these people without whom my project would not have been such a great learning experience.

Parisa Vinay

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## Introduction

Disability need not be an obstacle to success. I have had motor neurone disease for practically all my adult life. Yet it has not prevented me from having a prominent career in astrophysics and a happy family life.

Reading the World report on disability, I find much of relevance to my own experience. I have benefitted from access to first class medical care. I rely on a team of personal assistants who make it possible for me to live and work in comfort and dignity. My house and my workplace have been made accessible for me. Computer experts have supported me with an assisted communication system and a speech synthesizer which allow me to compose lectures and papers, and to communicate with different audiences.

But I realize that I am very lucky, in many ways. My success in theoretical physics has ensured that I am supported to live a worthwhile life. It is very clear that the majority of people with disabilities in the world have an extremely difficult time with everyday survival, let alone productive employment and personal fulfilment.

- Dataset

Table Name	State Code	District Code	Area Name	Total/Rural/Urban
Disability	Age-group	Total disabled	Total disabled population - Males	Total disabled population - Females
Main worker – Persons	Main worker- Males	Main worker- Females	Marginal worker - Less than 3 months - Persons	Marginal worker - Less than 3 months - Males
Marginal worker - Less than 3 months - Females	Marginal worker - 3-6 months - Persons	Marginal worker - 3-6 months - Males	Marginal worker - 3-6 months - Females	Non-worker - Persons
Non-worker - Males	Non-worker - Females			

## **Scope of the Analysis**

Data science has presented new possibilities for greater independence, improved care, and better outcomes for people with disabilities. When translated into data and analysed, these measures could indeed provide insights into the health of people living with chronic physical or mental illness or disabilities.

We are now seeing society becoming far more understanding and inclusive of the disabled community, but with the United Nations reporting that around 15% of the world's population suffer with some type of disability, there is a growing feeling that we need to do more, to help make the lives of people with disabilities easier. Data Science and Artificial Intelligence has come to the forefront of technology in the last few years, and several practitioners are taking a more philanthropic outlook on life, supporting people suffering with both physical and mental disabilities.

One of the areas where Machine Learning is playing a prominent role, is the support of people suffering with Autism Spectrum Disorder (ASD), which is a condition suffered by approximately 1 in every 100 people, with men more likely to be diagnosed with the condition than women. It affects children at around age 3, and results in the child having difficulty processing or engaging in human interaction or emotion, which can make integrating into groups of other children very difficult. However, the London Knowledge Lab was incredibly successful in introducing a group of ASD children to a virtual autonomous robot called Andy.

Since such vast field of data present of the Indian Disability there is wide range of scope of the analysis of date. For example:

- a) State wise import and export
- b) Disability wise import and export
- c) Area wise import and export, etc.

## **Existing System**

Before existence of Data Science, analysing data used to be hectic task and existing system didn't used to analyses the data with perfection. Without existence of current cutting-edge technology of data science, we can get actionable insights in the dataset of the Indian Trade. Following are the benefits which weren't present in the existing system of data analysing:

1. Making Better Decision with the Help of Data
2. Directing actions based on trends- which later defines the goals required for profit.
3. Doing challenging stuffs with the help of prediction which is done by data.
4. Identifying various opportunities to increase the profit.
5. Making decision with Quantifiable, data driven evidence so that loss doesn't happens.
6. Testing the decisions taken by the data and watching and analysing the trend.

## **Source of the Dataset**

- The dataset is taken from the Kaggle with the name “Statistical Analysis on Disable Data”
  - <https://www.kaggle.com/lakshyaag/Statistical-Disable-data>
- Author of the Kumaresh Babu N S
- Data last updated August 2020



## Analysis of Dataset

1. Find the No. of Disable people suffering from mental Illness whose age is less than 15 and from India:

a) Introduction: The analysis shows the mental illness of people with the age less than 15 in India.

b) Specific Requirements/Functions and Formulas:

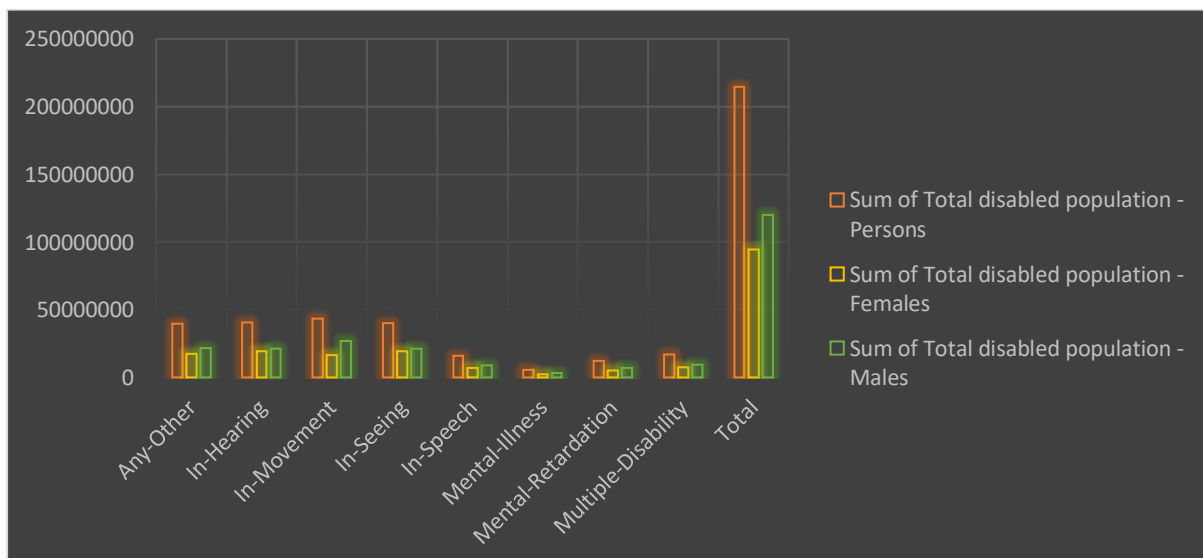
a. Pivot table of the data of Export

b. With the help of data Bar chart is plotted.

c) Analysis Results:

a. Age-group, Area Name, Disease, Sum of Total disabled population – Persons

b. Mental-Illness is the only disease that is effected for the very few people.



2. Find the state with highest No. of disable People Suffering From In-Seech:

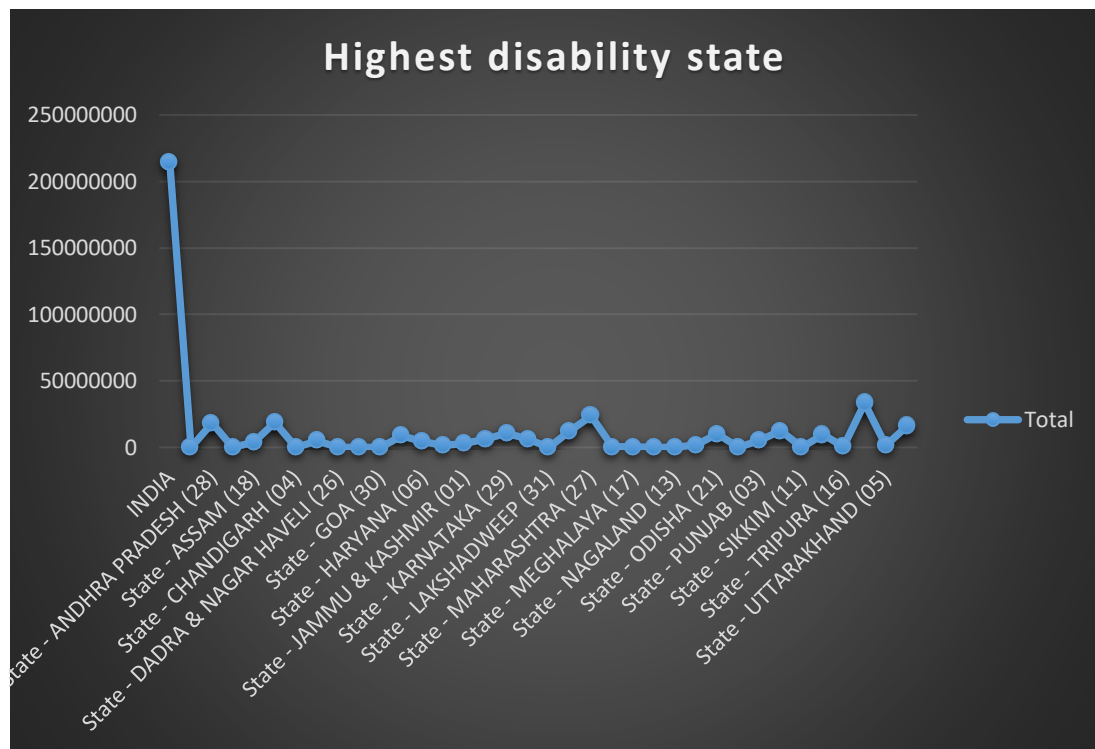
d) Introduction: The analysis shows the Disability of people suffering from In-Seech by state wise.

e) Specific Requirements/Functions and Formulas:

- a. Pivot table of the data of Import.
- b. With the help of data Bar chart is plotted.

f) Analysis Results:

- a. Disability, Age-group, States, sum of Total disabled population – Persons.
- b. Maharashtra is the only state that is having high Disability cases.



3. Find the no. of people with total disability and non-working persons from Karnataka:

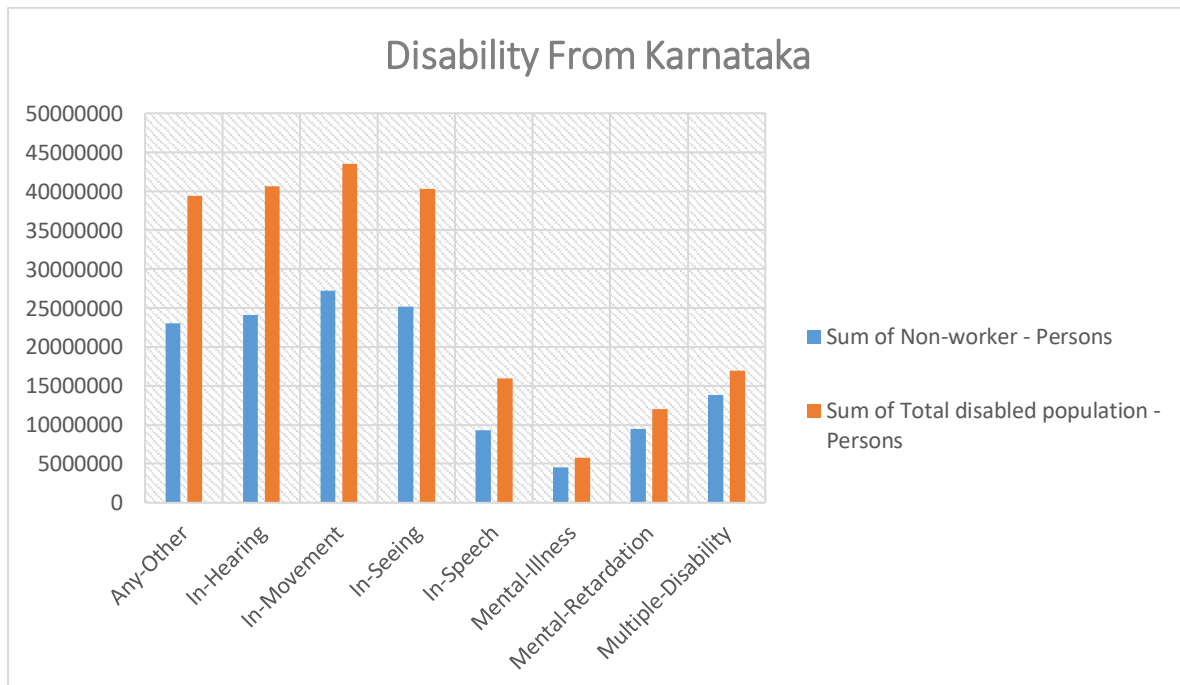
a. Introduction: The analysis shows the no. of disability people and non-working persons from Karnataka.

b. Specific Requirements/Functions and Formulas:

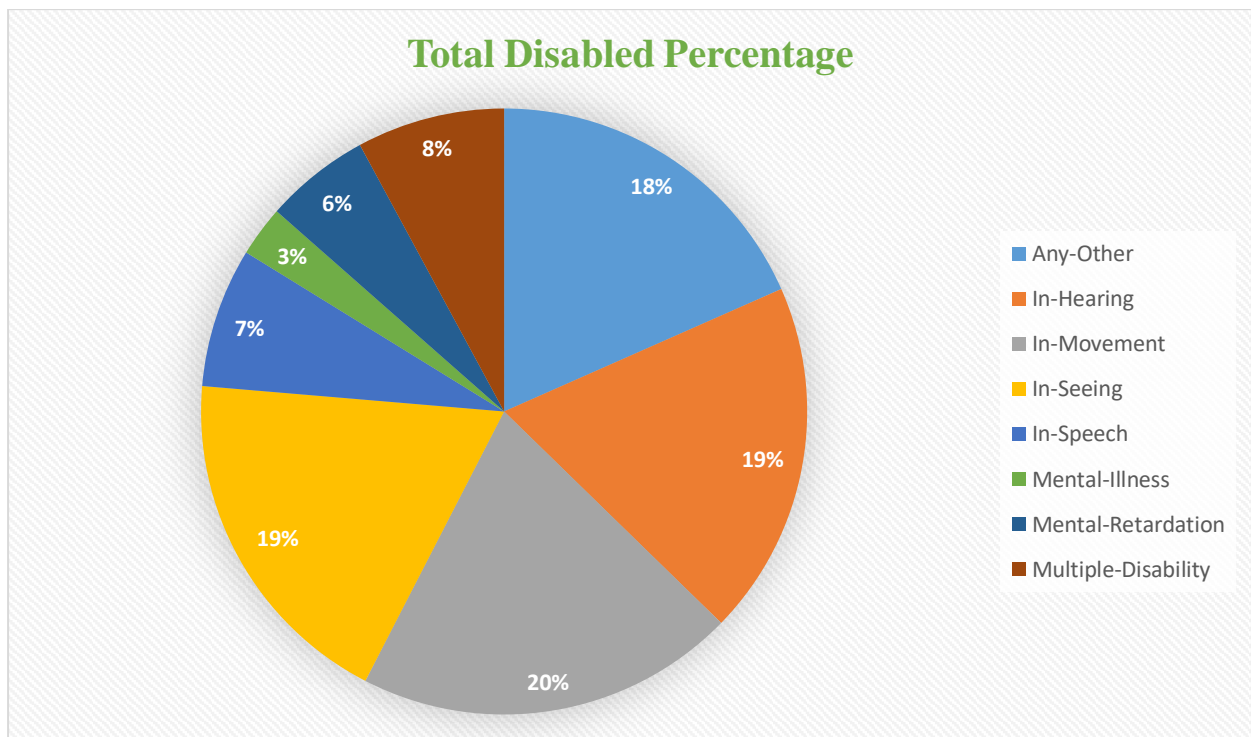
- i. Pivot table of the data of Import.
- ii. With the help of data Bar chart is plotted.

c. Analysis Results:

- i. Area Name, Age-group, Disability, Sum of Non-worker- Persons, Sum of Total disabled population – Persons.
- ii. In-Movement is the disease that is highly facing in Karnataka.



4. Find the percentage of disabled people suffering from in-movement from over India:
- Introduction: The analysis shows the percentage of suffering people with In-Movement.
  - Specific Requirements/Functions and Formulas:
    - Pivot table of the data of Import.
    - With the help of data Bar chart is plotted.
  - Analysis Results:
    - Area Name, Area-group, Disability, Sum of Total disabled population – Persons.
    - In-hearing, In-seeing having the highest percentage Ratio.



5. Find the total disable people from Maharashtra who are not working females whose age is between than 15 – 60:

a. Introduction: The analysis shows the percentage of suffering people with In-Movement.

b. Specific Requirements/Functions and Formulas:

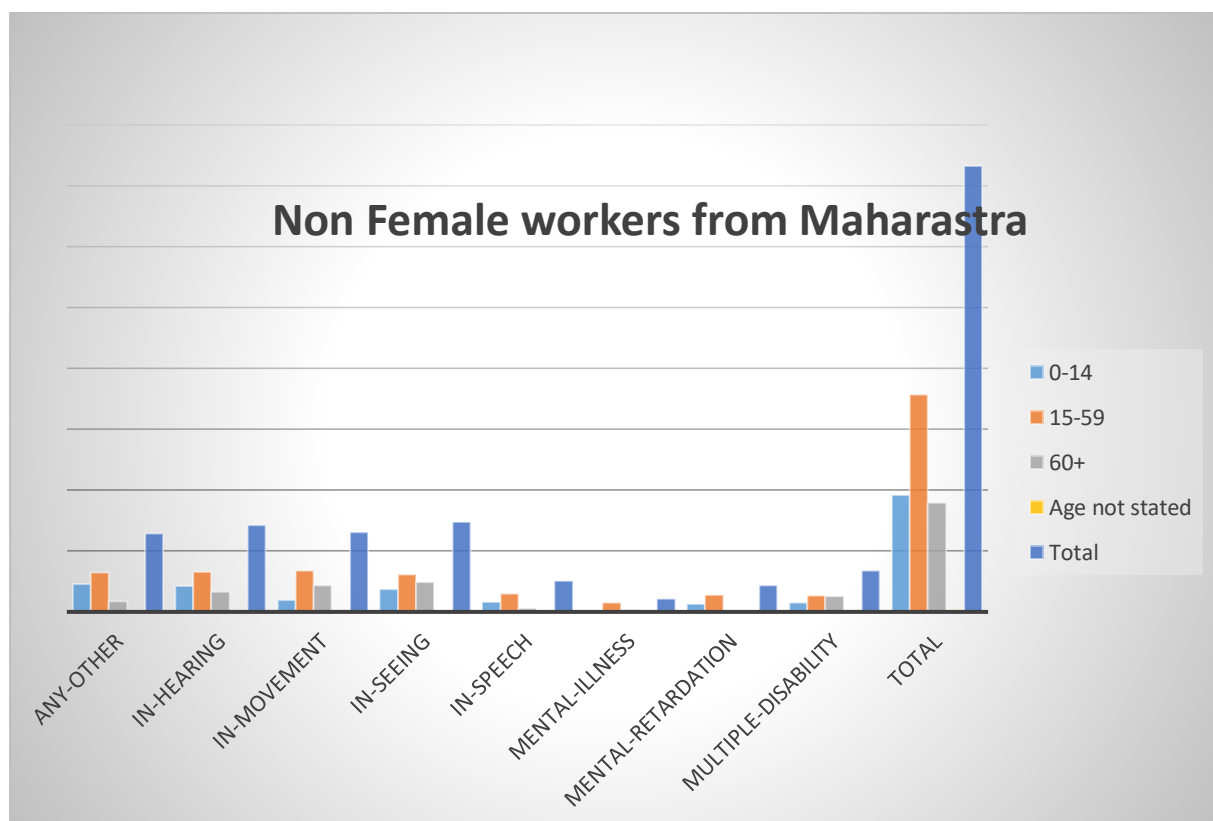
i. Pivot table of the data of Import.

ii. With the help of data Bar chart is plotted.

c. Analysis Results:

i. Area Name, Sum of Non – Worker – Females, Age, Disability.

ii. In-hearing having the highest disability.



### **List of Analysis with Results**

- Import is always more than the export creating a trade deficit which we can see in read bar graph.
- Mental-Illness is the only disease that is effected for the very few people.
- Maharashtra is the only state that is having high Disability cases.
- In-Movement is the disease that is highly facing in Karnataka.
- In-hearing, In-seeing having the highest percentage Ratio.
- In-hearing having the highest disability.
- Karnataka is one of the top state that will provide diseases.
- Maharashtra also prepare much cases in the state.
- Each Disease having the one famous disease.

## **References**

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