**BIG DATA ANALYTICS – AIR QUALITY ANALYSIS SYNOPSIS**

**INTRODUCTION:**

Air pollution occurs when harmful or excessive substances, including gases (such as carbon dioxide, ammonia, carbon monoxide, sulfur dioxide, nitrous oxides, methane, and chlorofluorocarbons) particulates (both organic and inorganic), and biological molecules are introduced into earth’s atmosphere.

Poor air quality can negatively affect human and environmental health. Air pollution causes damage to crops, animals, forests, and bodies of water. In humans, poor air quality can lead to a multitude of problems that can include respiratory and cardiovascular diseases.

The basic idea behind this project is to collect the required data of a particular city and calculate pollution levels and generate reports on the same based on the data.

We have chosen this topic based on real-world scenarios. Implementation of this project in the current scenario will lead to awareness amongst people about the causes and effects of air pollution and also provide solutions that will reduce the same.

**DATA:**

* The population of a city
* Birth and Death rate of the people living in that city
* Rate of CFC producing electronic appliances
* Count of vehicles owned per family and the count of vehicles sold by the industries in a particular month/year
* Count of industries in a city
* Effectiveness of public transportation
* Count of people admitted to hospital due to airborne diseases in a particular month/year

**PROBLEM STATEMENT:**

Analysis of pollution level based on the data and generate

* Suggestions to overcome the problem
* Possible air borne diseases
* Calculate average life expectancy rate of the people living in that city