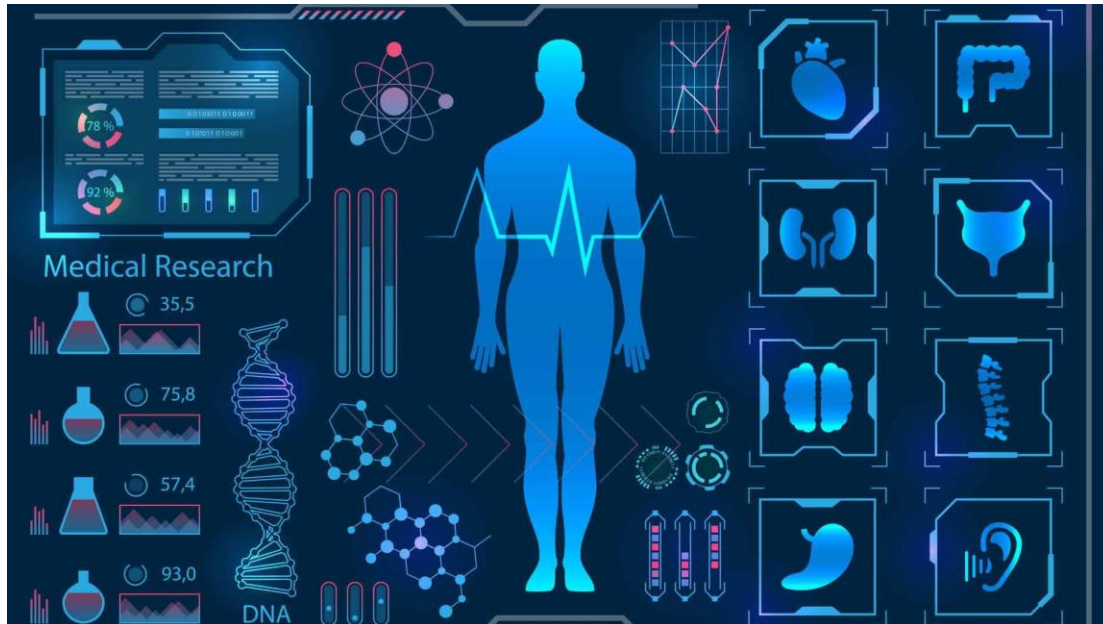
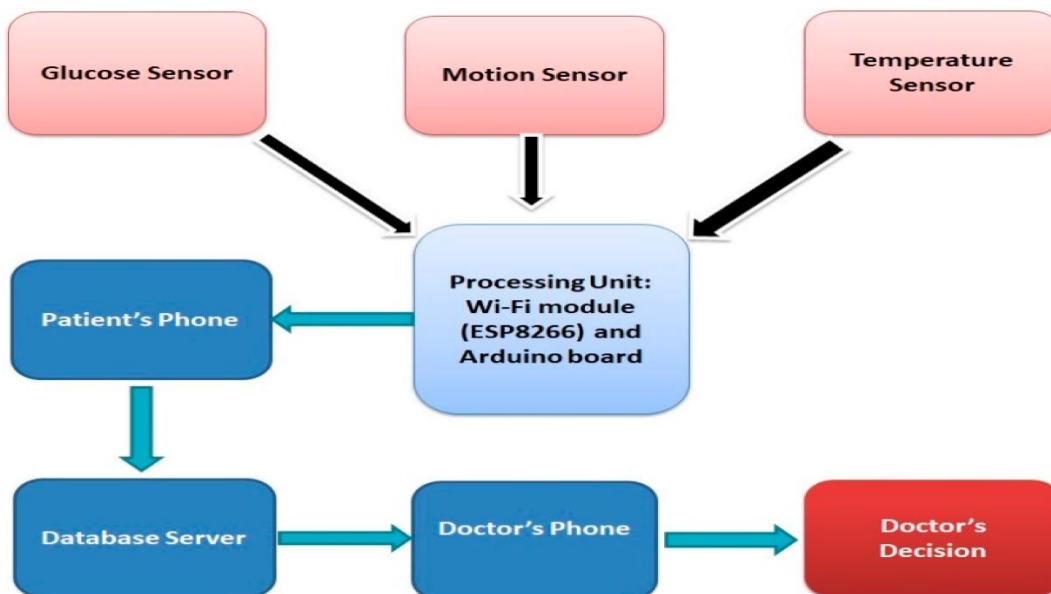


## PHASE-4

### AI Based Diabetes Prediction System:

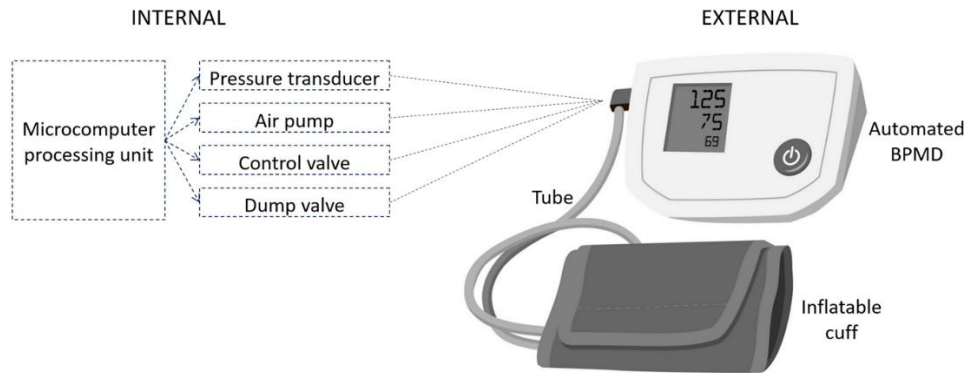


A software application or platform that utilizes artificial intelligence (AI) and machine learning techniques to analyze medical and demographic data of individuals and predict the likelihood of them developing diabetes in the future. This system provides early risk assessment and personalized preventive measures to help individuals manage and reduce their risk of diabetes.



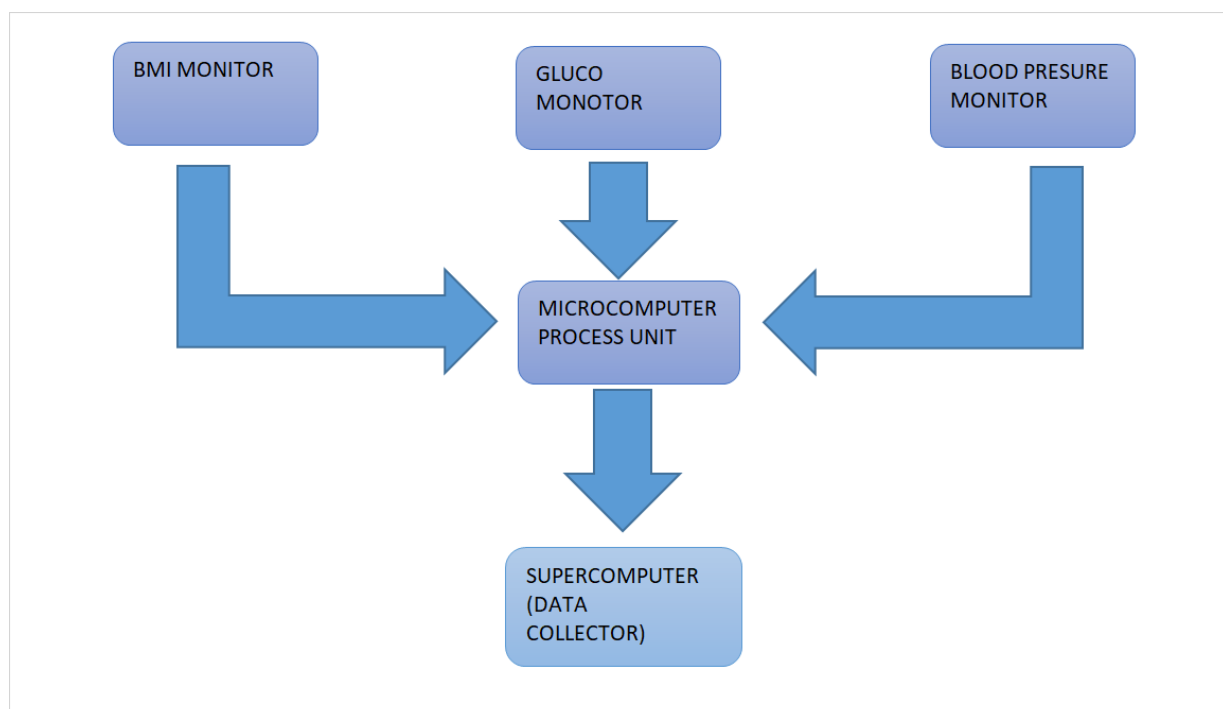
## DIGITAL BLOOD PRESURE MONITOR:

A digital blood pressure monitor will not be as accurate if your body is moving when you are using it. Also, an irregular heart rate will make the reading less accurate. However, digital monitors are the best choice for most people.



## DATA PREPROCESSING:

A software application or platform that utilizes artificial intelligence (AI) and machine learning techniques to analyze medical and demographic data of individuals and predict the likelihood of them developing diabetes in the future. This system provides early risk assessment and personalized preventive measures to help individuals manage and reduce their risk of diabetes. Using for basic embedded systems in Arduino uno board simple implementation of input information getting device.



## Model Selection:

Choose machine learning algorithms suitable for classification tasks. Common choices for binary classification (diabetes vs. non-diabetes) include:

Using:

1. machine learning algorithms.
2. EMBEDDED C-LANGUAGE PROGRAM

## Model :

model is implement on low level languages, medium level languages and High level machine learning languages. There use for data structure , syntaxes and iteration loops.

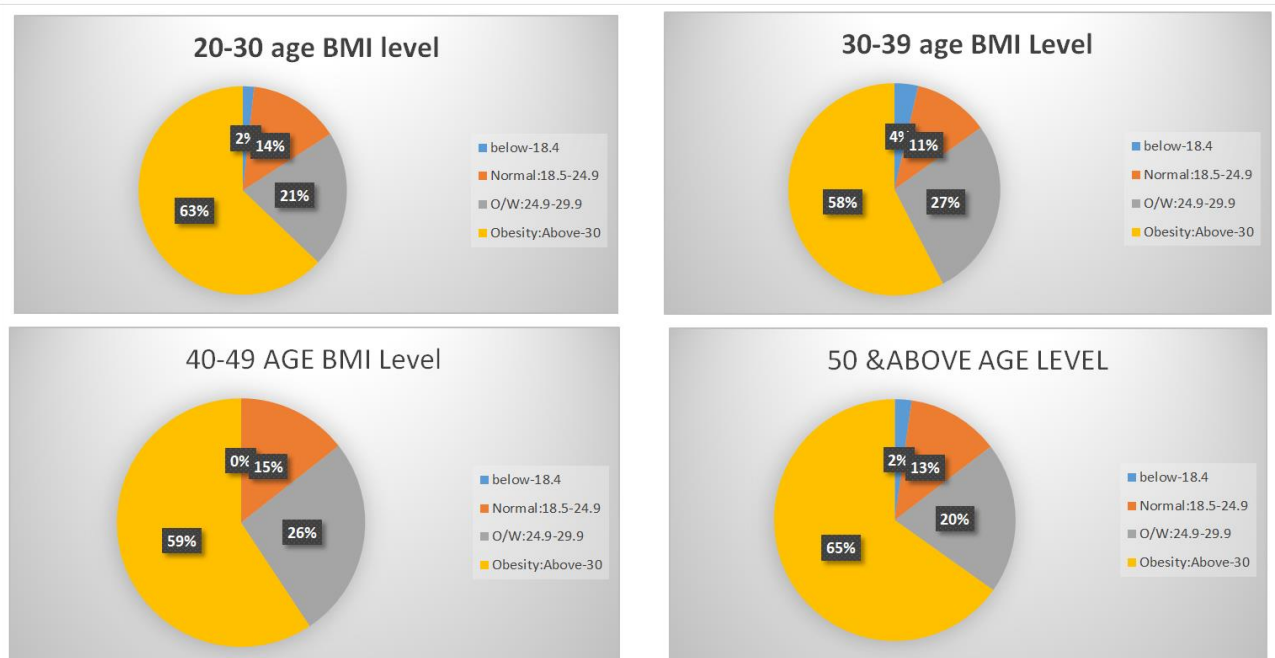
## Data Splitting:

Split your dataset into training, validation, and test sets. A common split is 70% for training, 15% for validation, and 15% for testing.

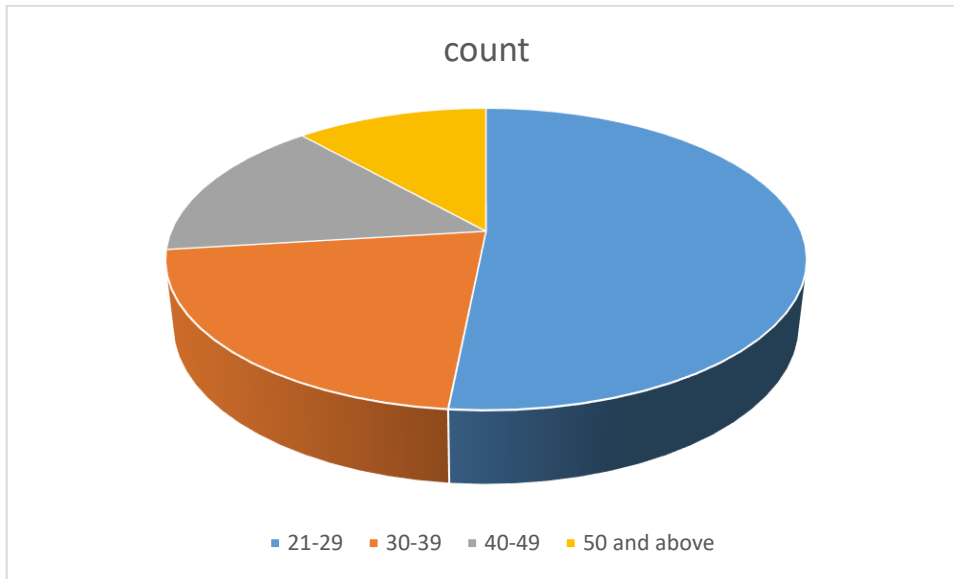
### Data splitting criteria:

1. Age :21-above50
2. BMI level :0-70.0Kg/M<sup>2</sup>
3. Glucose level :0-200mg/dL
4. Blood pressure level :0-122 mm/Hg

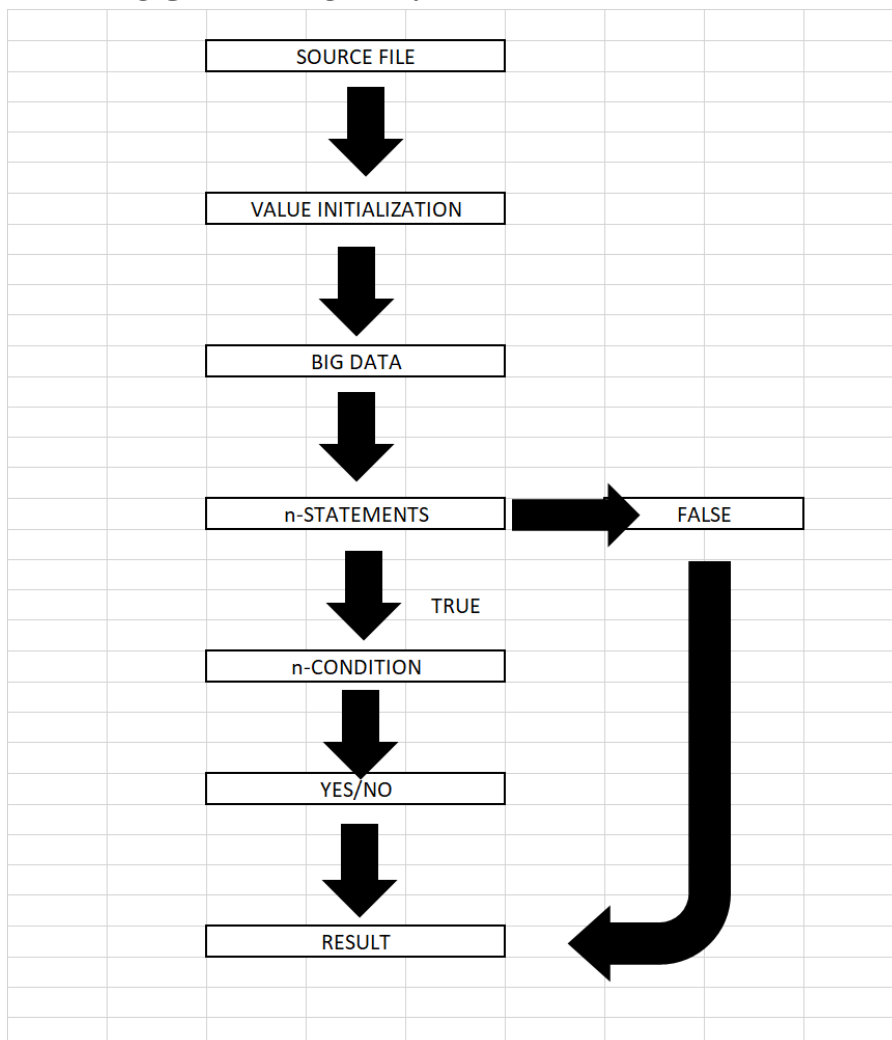
## BMI LEVEL:



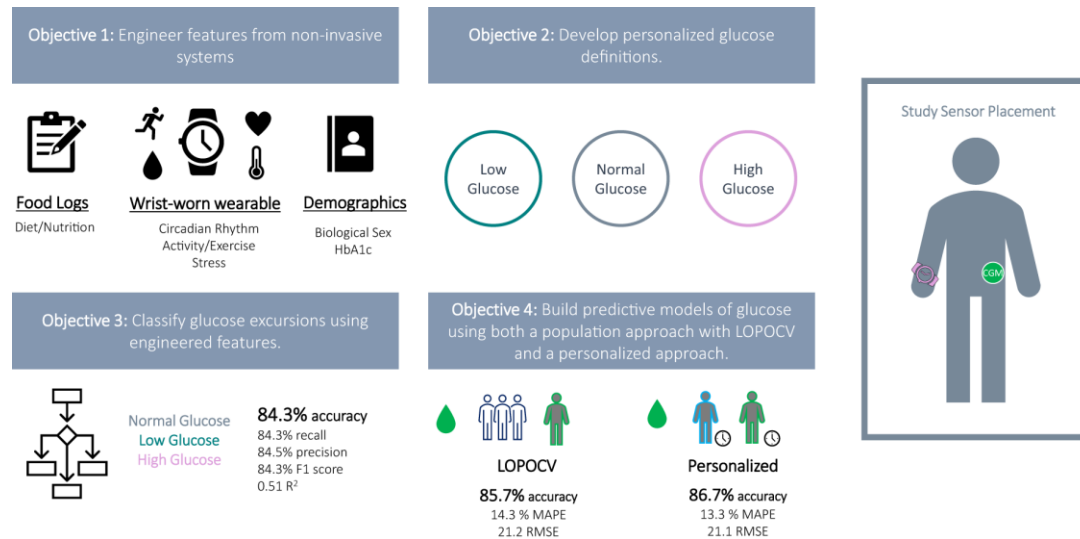
## AGE LIMIT:



## PROGRAM MODEL:



## OUTPUT PREDICTION:



The output is depending of the analyzing information and getting data . More data is for heath conditions and health issues.

Gather a comprehensive dataset that includes medical and demographic information of individuals, such as age, gender, BMI (Body Mass Index), blood pressure, glucose levels, pregnancy, Skin thinkness,Insuline level and other relevant features.

Collect split up the data for age wise and BMI (Body Mass Index)level in asper dataset.

## BLOOD SAMPLE TESTING SECTION :





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*The project is 90% is complete for orientation of the simple innovation for using in data sheet. Next week will submitted for full of combining projects Mostly required for electronic EMBEDDED system.*