



# Vidyavardhini's College of Engineering & Technology

Department of Computer Science and Engineering (Data Science)

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<b>Name:</b>	Divya Madhav Patil
<b>Roll No:</b>	
<b>Class/Sem:</b>	BE/VII
<b>Experiment No.:</b>	02
<b>Title:</b>	Apply various data analysis and visualization techniques on EHR.
<b>Date of Performance:</b>	
<b>Date of Submission:</b>	
<b>Marks:</b>	
<b>Sign of Faculty:</b>	



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**Aim** Apply various data analysis and visualization techniques on EHR.

## **Theory:**

Data visualization of social media analysis is the process of representing social media data in a visual format such as graphs, charts, and tables to make it easier to understand and identify patterns, trends, and insights. Social media data visualization is an important aspect of social media analysis as it helps to make complex data more accessible and understandable, and enables businesses to quickly identify areas that need improvement, measure the effectiveness of their social media campaigns, and make data-driven decisions.

Common types of social media data visualizations include:

- Line charts: Used to show trends over time, such as the number of followers or engagement rate.
- Bar charts: Used to compare different metrics or data points, such as the engagement rate on different social media platforms.
- Pie charts: Used to show the proportion of different metrics or data points, such as the distribution of followers by location.
- Heatmaps: Used to show the density of activity, such as the times of day when users are most active on social media.
- Scatter plots: Used to show the relationship between two variables, such as the correlation between the number of posts and the engagement rate.
- By using data visualization techniques, businesses can gain a better understanding of their social media performance and improve their social media strategy

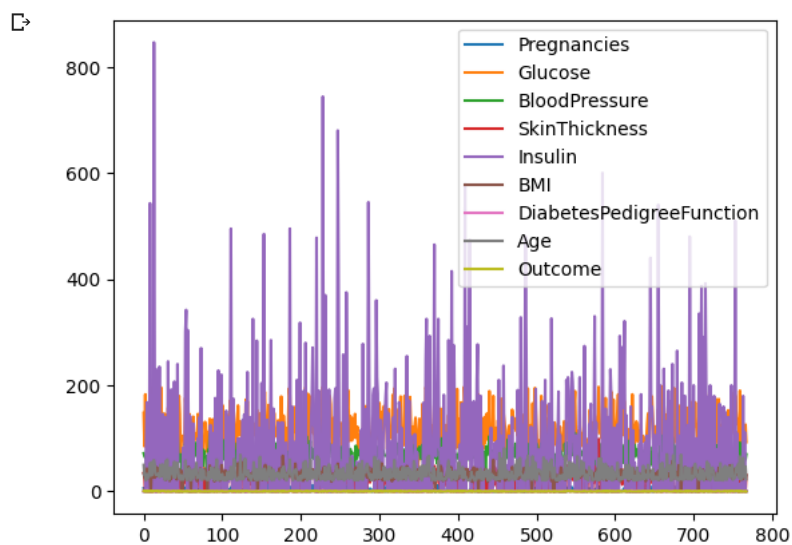
## **Program:**

```
import pandas as pd
import matplotlib.pyplot as plt
```

```
df = pd.read_csv('data.csv')
```

```
df.plot()
```

```
plt.show()
```

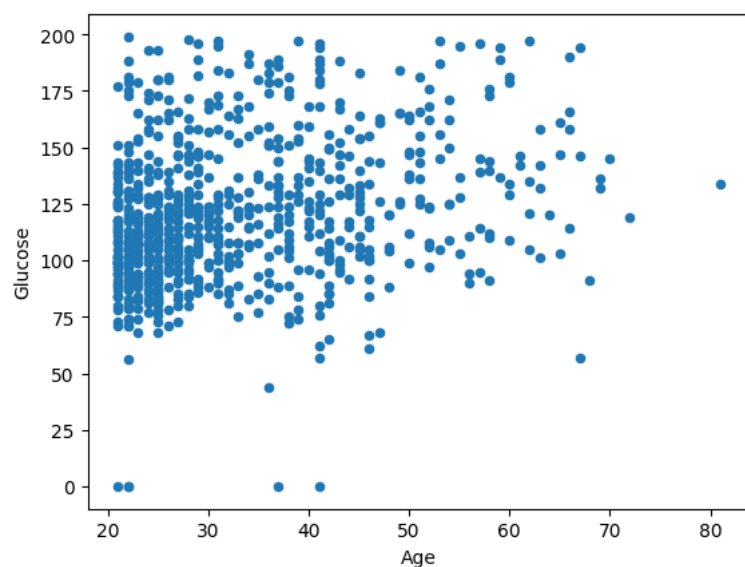


```
import pandas as pd
import matplotlib.pyplot as plt
```

```
df = pd.read_csv('data.csv')
```

```
df.plot(kind = 'scatter', x = 'Age', y = 'Glucose')
```

```
plt.show()
```

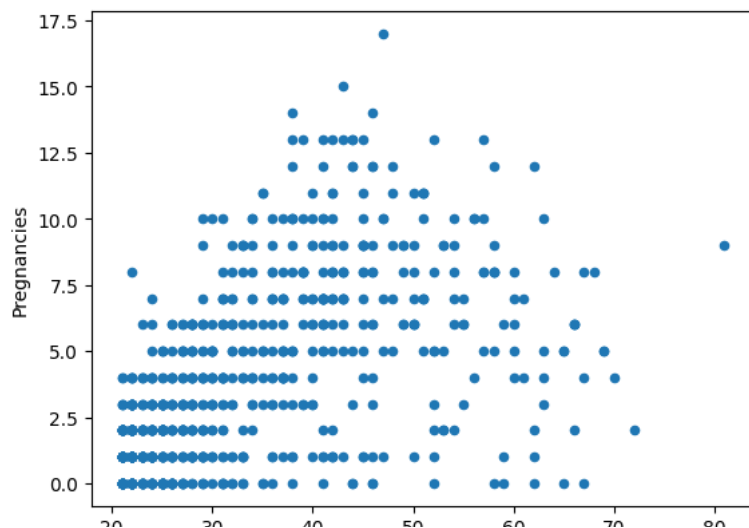


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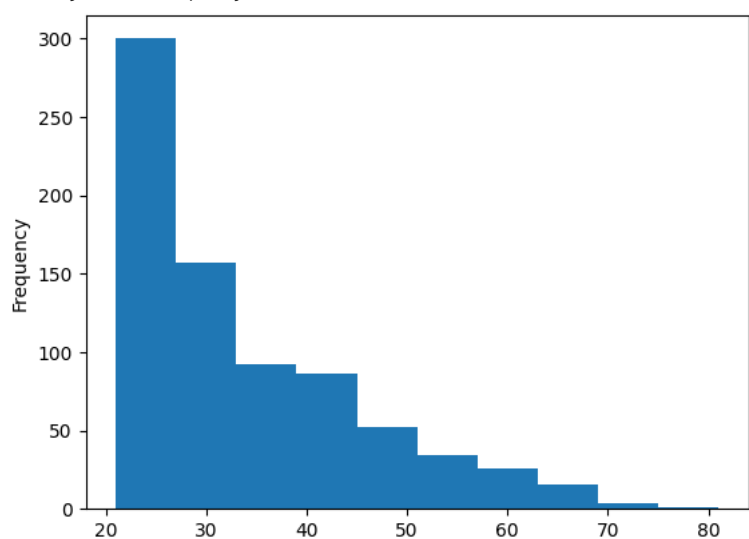
```
df.plot(kind = 'scatter', x = 'Age', y = 'Pregnancies')
```

```
plt.show()
```



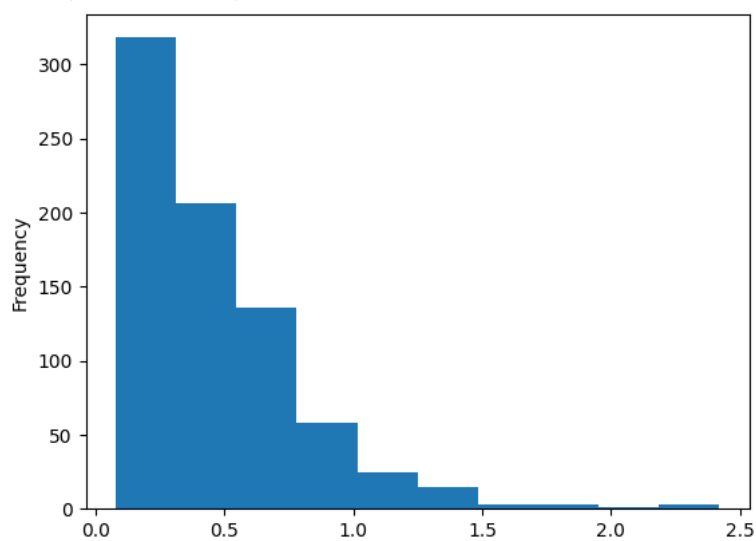
```
df["Age"].plot(kind = 'hist')
```

```
<Axes: ylabel='Frequency'>
```



```
df["DiabetesPedigreeFunction"].plot(kind = 'hist')
```

```
<Axes: ylabel='Frequency'>
```





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## **Conclusion:**

data analysis and visualization techniques are invaluable tools for gaining insights, making informed decisions, and continuously improving strategies in both social media analysis and healthcare, such as Electronic Health Records. These techniques facilitate a deeper understanding of data, enabling organizations to adapt and thrive in their respective domains.