

**Lead: Varad Khot & Team**

**Title: Diabetic Prediction Using Machine Learning**

**Output:**

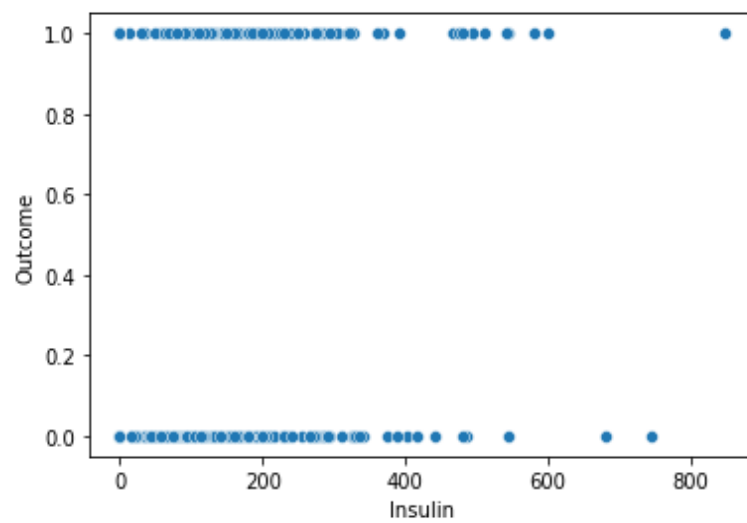
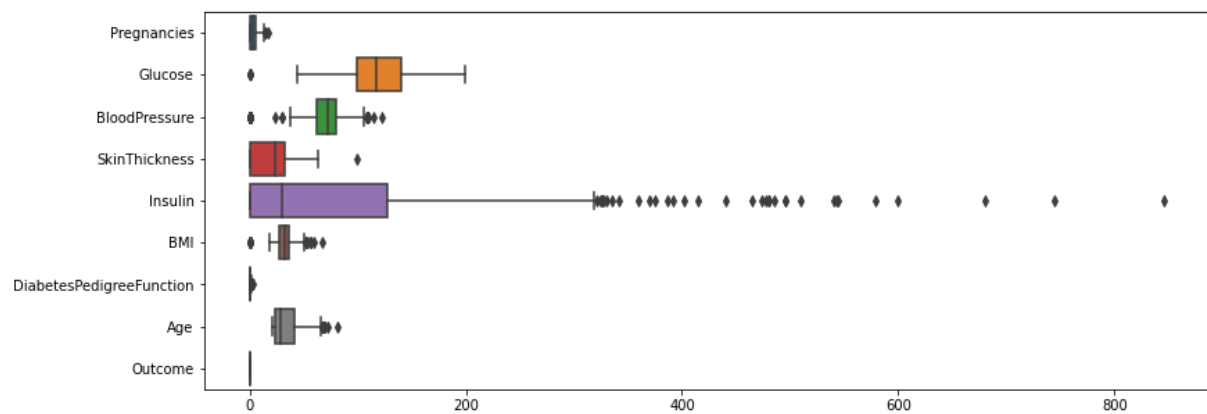
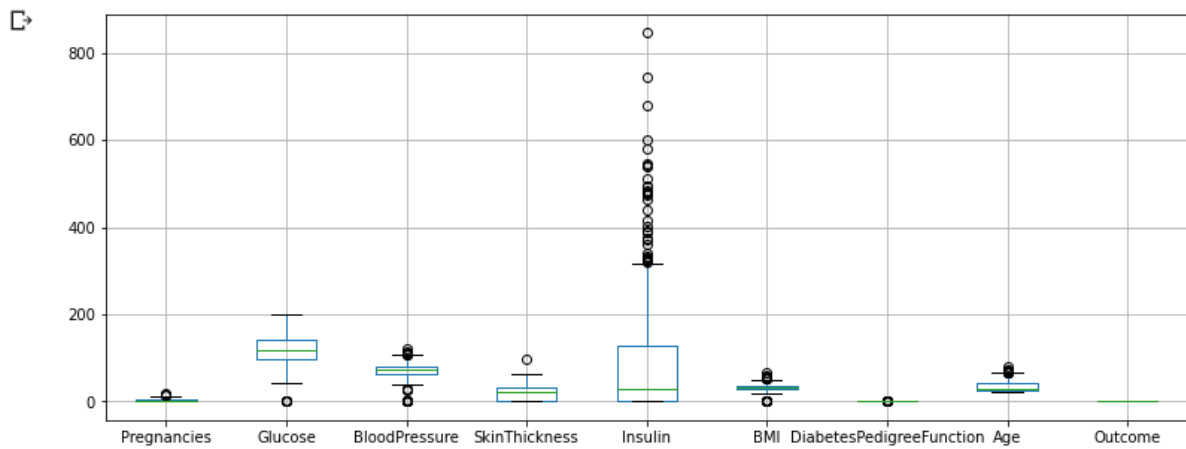
**0== Diabetic**

**1=Non Diabetic**

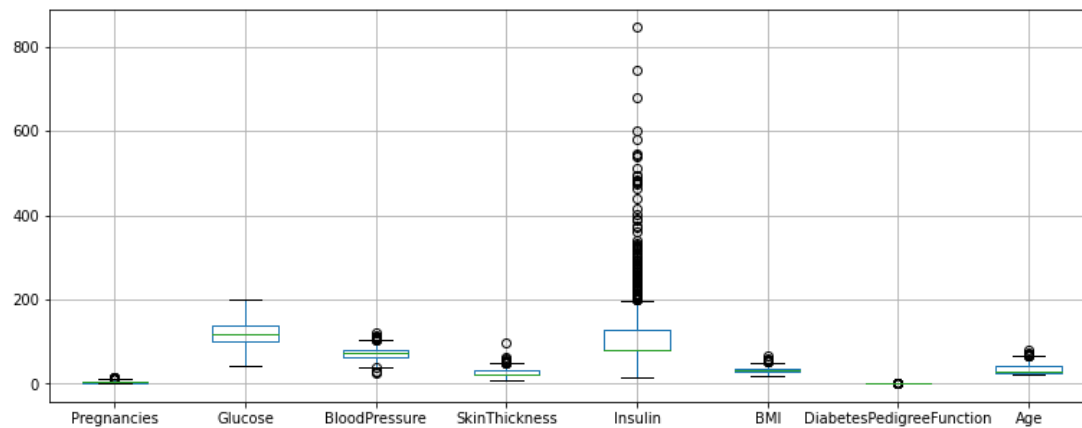
|   | Pregnancies | Glucose | BloodPressure | SkinThickness | Insulin | BMI  | DiabetesPedigreeFunction | Age | Outcome |
|---|-------------|---------|---------------|---------------|---------|------|--------------------------|-----|---------|
| 0 | 6           | 148     | 72            | 35            | 0       | 33.6 | 0.627                    | 50  | 1       |
| 1 | 1           | 85      | 66            | 29            | 0       | 26.6 | 0.351                    | 31  | 0       |
| 2 | 8           | 183     | 64            | 0             | 0       | 23.3 | 0.672                    | 32  | 1       |
| 3 | 1           | 89      | 66            | 23            | 94      | 28.1 | 0.167                    | 21  | 0       |
| 4 | 0           | 137     | 40            | 35            | 168     | 43.1 | 2.288                    | 33  | 1       |

|       | Pregnancies | Glucose    | BloodPressure | SkinThickness | Insulin    | BMI        | DiabetesPedigreeFunction |
|-------|-------------|------------|---------------|---------------|------------|------------|--------------------------|
| count | 768.000000  | 768.000000 | 768.000000    | 768.000000    | 768.000000 | 768.000000 | 768.000000               |
| mean  | 3.845052    | 120.894531 | 69.105469     | 20.536458     | 79.799479  | 31.992578  | 0.471876                 |
| std   | 3.369578    | 31.972618  | 19.355807     | 15.952218     | 115.244002 | 7.884160   | 0.331329                 |
| min   | 0.000000    | 0.000000   | 0.000000      | 0.000000      | 0.000000   | 0.000000   | 0.078000                 |
| 25%   | 1.000000    | 99.000000  | 62.000000     | 0.000000      | 0.000000   | 27.300000  | 0.243750                 |
| 50%   | 3.000000    | 117.000000 | 72.000000     | 23.000000     | 30.500000  | 32.000000  | 0.372500                 |
| 75%   | 6.000000    | 140.250000 | 80.000000     | 32.000000     | 127.250000 | 36.600000  | 0.626250                 |
| max   | 17.000000   | 199.000000 | 122.000000    | 99.000000     | 846.000000 | 67.100000  | 2.420000                 |

```
df.boxplot(figsize=(13,5))  
plt.show()
```



```
[22] X.boxplot(figsize=(13,5))  
plt.show()
```



✓  
0s

```
[43] Y_test
```

```
586    1  
236    1  
522    0  
629    0  
179    1  
..  
459    0  
597    0  
723    0  
209    1  
622    0  
Name: Outcome, Length: 192, dtype: in
```

✓  
0s

```
[44] accuracy_score(Y_test,Y_pred)
```

```
0.703125
```