

```
import matplotlib.pyplot as plt tp=int(input("Enter the
number of true postitive(TP):")) tn=int(input("Enter the
number of true negative(TN):")) fp=int(input("Enter the
number of false postitive(FP):")) fn=int(input("Enter the
number of false negative(FN):"))
```

```
categories=["True Positive", "True Negative" , "False Positive" , "False Negative"]
values=[tp,tn,fp,fn]
```

```
plt.figure(figsize=(8,5)) plt.bar(categories,values,color=['green','blue',
'red','orange']) plt.xlabel("Prediction Categories") plt.ylabel("Count")
plt.title("Prediction Outcome Bar Graph") plt.show()
```

```
accuracy=(tp+tn)/(tp+tn+fp+fn) precision=tp/(tp + fp) if (tp+fp) != 0 else 0 recall= tp/(tp+fn)
if (tp+fn) != 0 else 0 f1_score= 2*(precision * recall)/ (precision + recall) if (precision +
recall) != 0 else 0
```

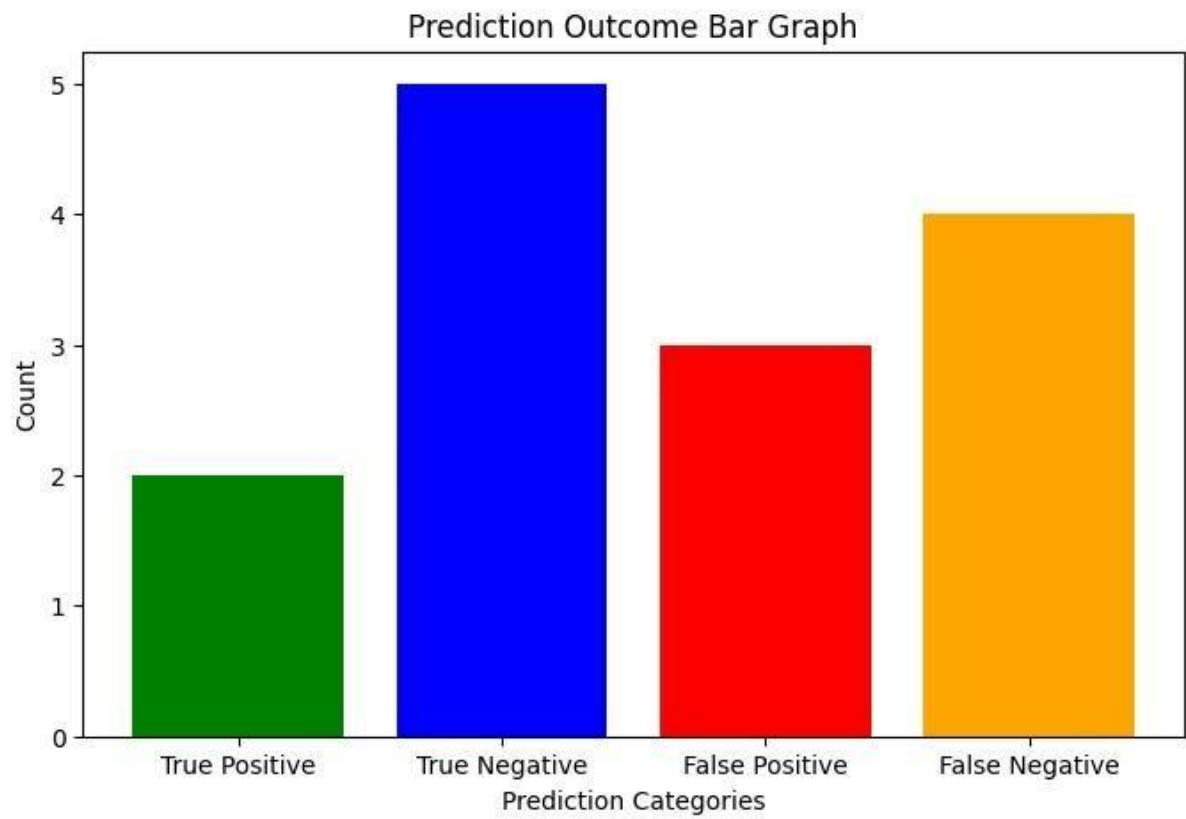
```
print(f"Accuracy:{accuracy:.2f}") print(f"Precision:{precision:.2f}")
print(f"Recall:{recall:.2f}") print(f"F1 score:{f1_score:.2f}")
```

Enter the number of true postitive(TP): 2

Enter the number of true negative(TN): 5

Enter the number of false postitive(FP): 3

Enter the number of false negative(FN): 4



Accuracy:0.50

Precision:0.40

Recall(Sensitivity):0.33

F1 score:0.36