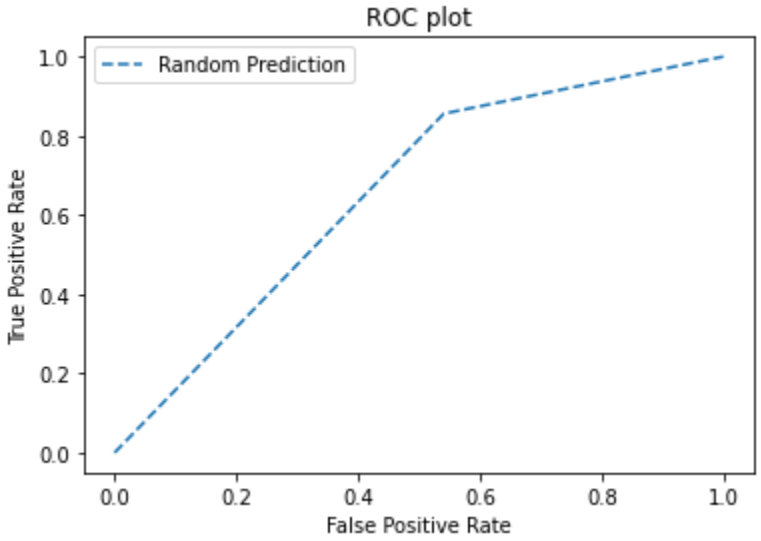
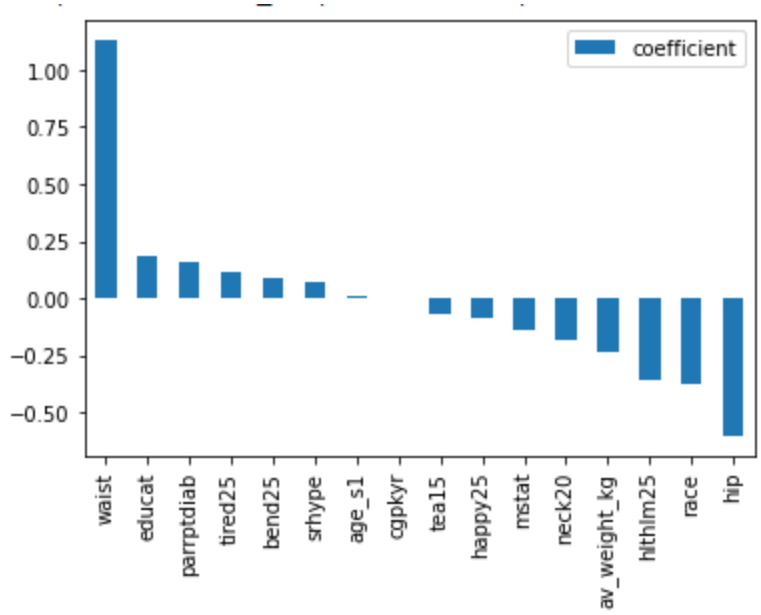
Evaluate the performance of your model(including ROC Curve), explain the performance and draw a meaningful conclusion.

The curve in the ROC plot leans towards the top left screen, which indicates that the test that was conducted was fairly accurate in terms of its predictions. Furthermore, after inspecting the performance metrics, I would say that they are all fairly high and the predictions that were made by the logistic regression algorithm were pretty accurate. The reason for that would most likely be that the variables that are picked to determine a person contracting CVD are pretty significant.

One of the things that caught me off guard in the second graph is that the waist has a high influence while hip has a low influence on cardiovascular disease. I thought this was strange because those are body parts that are close to each other, why do they have a reverse relationship? After some investigation, I found out that waist and hip have reverse effects on CVD. Overall, the variables that are located around the middle in the bar graph are the least influential on CVD and most likely irrelevant. Variables that are located on the left or right end of the bar graph indicates that it has a positive / negative effect on CVD.






```
#Precision Score
from sklearn.metrics import precision_score
precision_score(y_test, y_pred)
```

```
0.7104377104377104
```

```
#Recall
from sklearn.metrics import recall_score
recall_score(y_test, y_pred)
```

```
0.8559837728194726
```

```
#F1 Score
from sklearn.metrics import f1_score
f1_score(y_test, y_pred)
```

```
0.7764489420423183
```