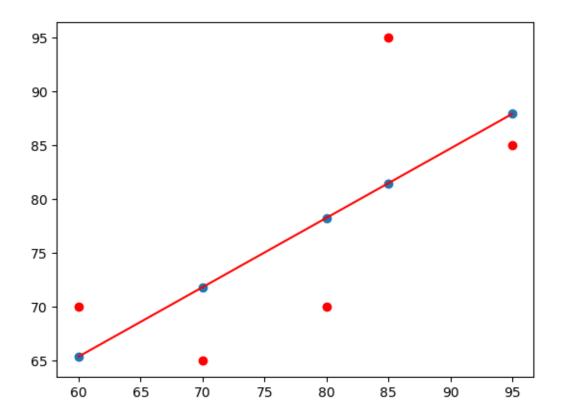
## i79nh24zg

## February 25, 2025

```
[1]: import pandas as pd
      import numpy as np
      import matplotlib.pyplot as plt
 [2]: x=np.array([95,85,80,70,60])
      y=np.array([85,95,70,65,70])
 [3]: model= np.polyfit(x, y, 1)
 [4]: model
 [4]: array([ 0.64383562, 26.78082192])
 [7]: predict = np.poly1d(model)
      predict(65)
 [7]: 68.63013698630137
 [8]: y_pred= predict(x)
      y_pred
 [8]: array([87.94520548, 81.50684932, 78.28767123, 71.84931507, 65.4109589])
 [9]: from sklearn.metrics import r2_score
      r2_score(y, y_pred)
 [9]: 0.4803218090889326
[10]: y_line = model[1] + model[0]* x
      plt.plot(x, y_line, c = 'r')
      plt.scatter(x, y_pred)
      plt.scatter(x,y,c='r')
```

[10]: <matplotlib.collections.PathCollection at 0x2597be74910>



[]: