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In [ ]: import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
from sklearn.model_selection import train_test_split
```

```
In [ ]: pip install -U scikit-learn
```

Requirement already satisfied: scikit-learn in c:\users\faiz\anaconda3\lib\site-packages (0.24.1)
 Collecting scikit-learn
 Downloading scikit_learn-1.0.2-cp38-cp38-win_amd64.whl (7.2 MB)
 Requirement already satisfied: scipy>=1.1.0 in c:\users\faiz\anaconda3\lib\site-packages (from scikit-learn) (1.6.2)
 Requirement already satisfied: joblib>=0.11 in c:\users\faiz\anaconda3\lib\site-packages (from scikit-learn) (1.0.1)
 Requirement already satisfied: threadpoolctl>=2.0.0 in c:\users\faiz\anaconda3\lib\site-packages (from scikit-learn) (2.1.0)
 Requirement already satisfied: numpy>=1.14.6 in c:\users\faiz\anaconda3\lib\site-packages (from scikit-learn) (1.20.1)
 Installing collected packages: scikit-learn
 Attempting uninstall: scikit-learn
 Found existing installation: scikit-learn 0.24.1
 Uninstalling scikit-learn-0.24.1:
 Successfully uninstalled scikit-learn-0.24.1
 Note: you may need to restart the kernel to use updated packages.
 ERROR: Could not install packages due to an OSError: [WinError 5] Access is denied: 'C:\\Users\\Faiz\\anaconda3\\Lib\\site-packages\\sklearn_check_build_check_build.cp38-win_amd64.pyd'
 Consider using the `--user` option or check the permissions.

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In [ ]:
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In [ ]: # Importing the dataset
#dataset = pd.read_csv('181105_missing-data.csv')
dataset = pd.read_csv('mldata (2).csv')
X = dataset.iloc[:, :-1].values #get a copy of dataset exclude last column
y = dataset.iloc[:, 1].values #get array of dataset in column 1st
```

```
In [ ]: # Splitting the dataset into the Training set and Test set
from sklearn.model_selection import train_test_split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=1/3, random_stat
```

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In [ ]: # Fitting Simple Linear Regression to the Training set
from sklearn.linear_model import LinearRegression
regressor = LinearRegression()
regressor.fit(X_train, y_train)

# Predicting the Test set results
y_pred = regressor.predict(X_test)
```

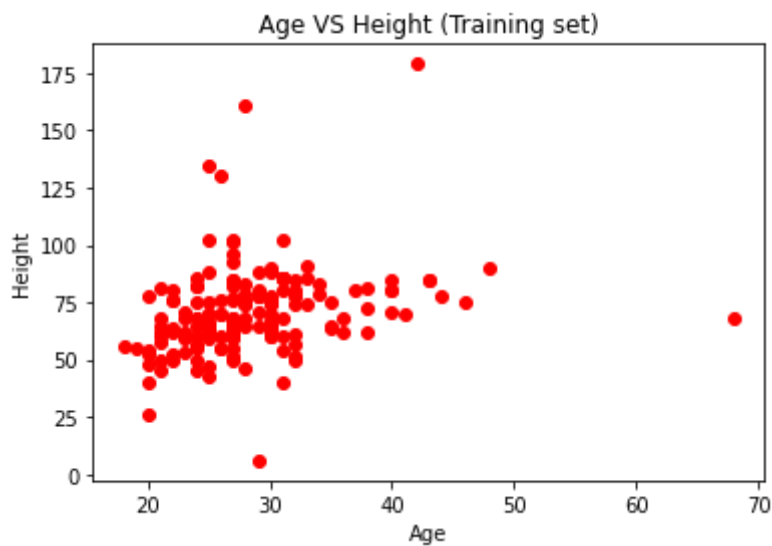
```
In [ ]: # Predicting the Test set results
y_pred = regressor.predict(X_test)
```

```
In [ ]: # Visualizing the Training set results
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```

viz_train = plt
viz_train.scatter(X_train[:,0], y_train, color='red')
# viz_train.plot(X_train[:,0], regressor.predict(X_train[:,0]), color='blue')
viz_train.title('Age VS Height (Training set)')
viz_train.xlabel('Age')
viz_train.ylabel('Height')
viz_train.show()

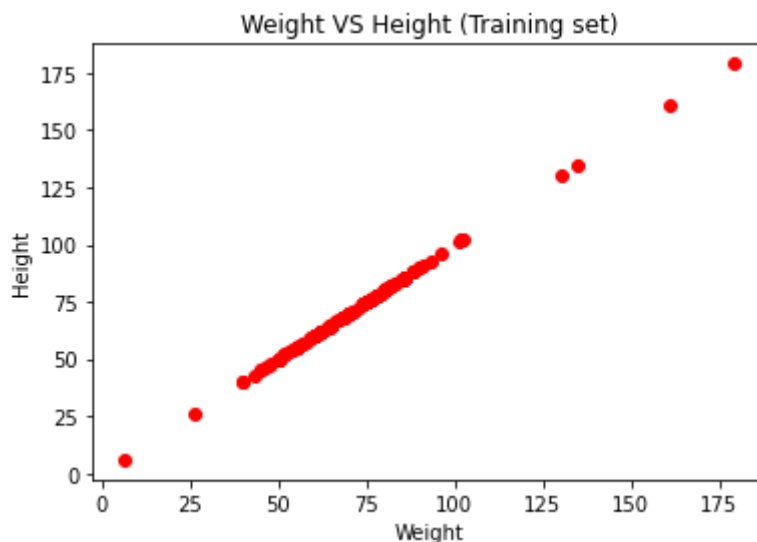
```



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In [ ]: # Visualizing the Training set results
viz_train = plt
viz_train.scatter(X_train[:,1], y_train, color='red')
# viz_train.plot(X_train[:,0], regressor.predict(X_train[:,0]), color='blue')
viz_train.title('Weight VS Height (Training set)')
viz_train.xlabel('Weight')
viz_train.ylabel('Height')
viz_train.show()

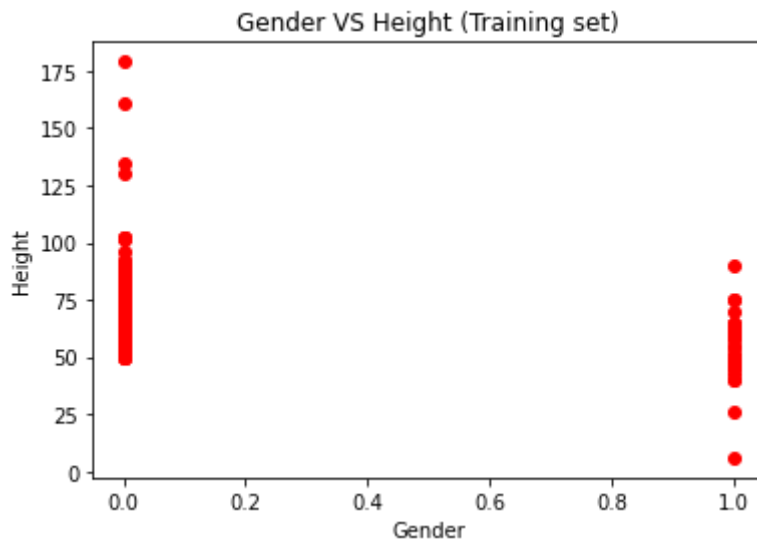
```



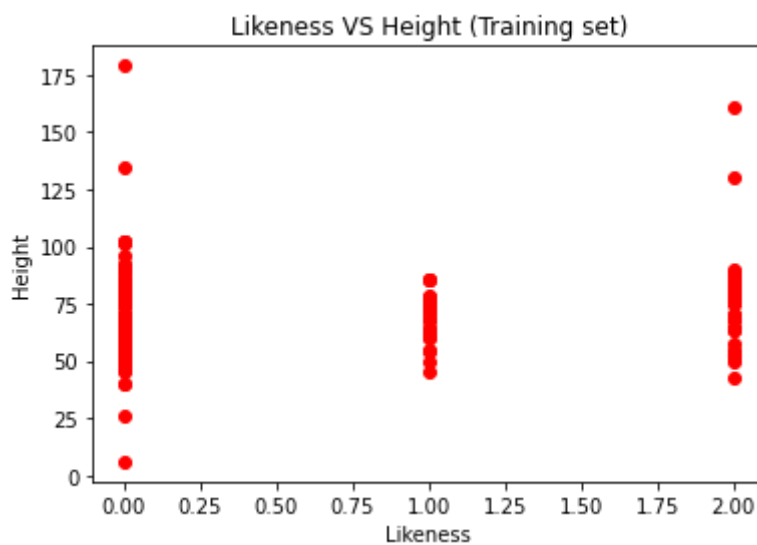
```

In [ ]: # Visualizing the Training set results
viz_train = plt
viz_train.scatter(X_train[:,2], y_train, color='red')
# viz_train.plot(X_train[:,0], regressor.predict(X_train[:,0]), color='blue')
viz_train.title('Gender VS Height (Training set)')
viz_train.xlabel('Gender')
viz_train.ylabel('Height')
viz_train.show()

```



```
In [ ]: # Visualizing the Training set results
viz_train = plt
viz_train.scatter(X_train[:,3], y_train, color='red')
# viz_train.plot(X_train[:,3], regressor.predict(X_train[:,3]), color='blue')
viz_train.title('Likeness VS Height (Training set)')
viz_train.xlabel('Likeness')
viz_train.ylabel('Height')
viz_train.show()
```



```
In [ ]: # Visualizing the Test set results
viz_test = plt
viz_test.scatter(X_test[:,0], y_test, color='red')
# viz_test.plot(X_train, regressor.predict(X_train[:,0]), color='blue')
viz_test.title('Age & Weight vs Height (Test set)')
viz_test.xlabel('Age & Weight')
viz_test.ylabel('Height')
viz_test.show()
```

