In [3]:
```
import tensorflow as tf
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
```

In [18]:
```
dataset = pd.read_csv('./centigradosFarenHeit.csv')
c = dataset.iloc[:,0:1].values
c = c.astype(float)
f = dataset.iloc[:,1:2].values
f = f.astype(float)
```

In [21]:
```
model = tf.keras.Sequential([
  tf.keras.layers.Dense(units=1, input_shape=[1])
])
```

In [22]:
```
model.compile(loss='mean_squared_error',
              optimizer=tf.keras.optimizers.Adam(0.1),
              metrics=['mean_squared_error'])
```

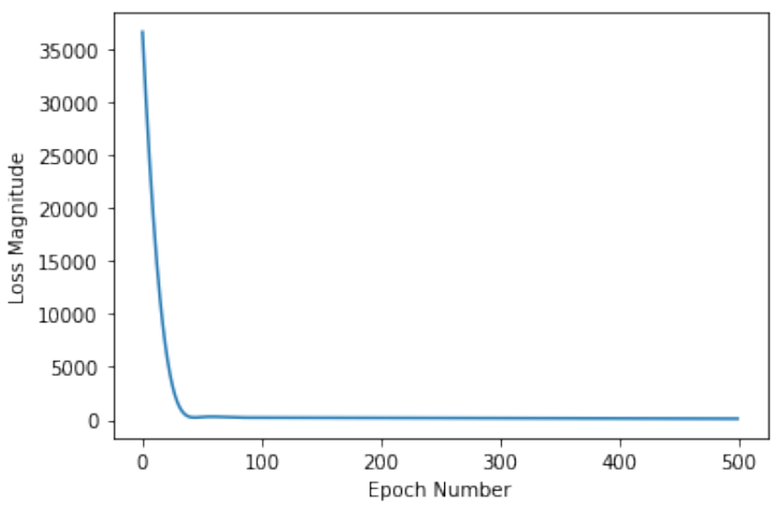
In [23]:
```
history = model.fit(c, f, epochs=500, verbose=False)
print("Finished training the model")
```

```
Finished training the model
```

In [24]:
```
history.params
```

Out[24]:
```
{'verbose': False, 'epochs': 500, 'steps': 1}
```

In [25]:
```
plt.xlabel('Epoch Number')
plt.ylabel("Loss Magnitude")
plt.plot(history.history['loss'])
plt.show()
```



In [30]:
```
print(model.predict([12.0]))
```

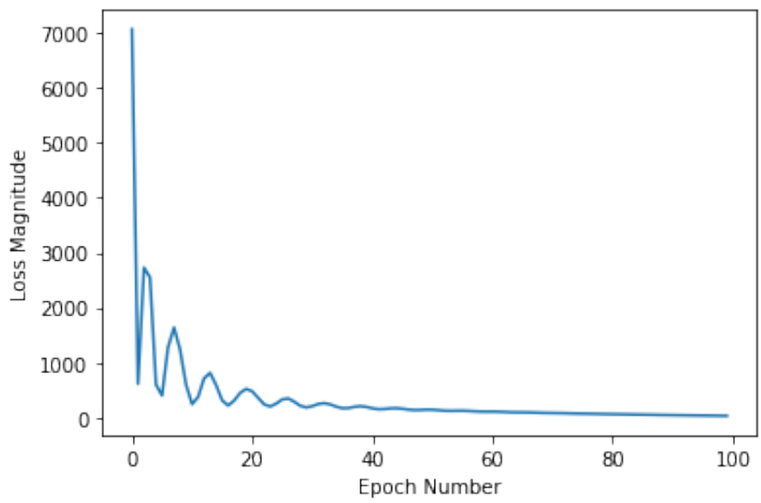
```
1/1 [==============================] - 0s 55ms/step
[[54.456665]]
```

In [ ]:
```

```

In [31]:
```
l0 = tf.keras.layers.Dense(units=4, input_shape=[1])
l1 = tf.keras.layers.Dense(units=4)
l2 = tf.keras.layers.Dense(units=1)

model = tf.keras.Sequential([l0, l1, l2])

model.compile(loss='mean_squared_error',
              optimizer=tf.keras.optimizers.Adam(0.1),
              metrics=['mean_squared_error'])

history = model.fit(c, f, epochs=100, verbose=False)
print("Finished training the model")

print(model.predict([12.0]))

plt.xlabel('Epoch Number')
plt.ylabel("Loss Magnitude")
plt.plot(history.history['loss'])
```

```
Finished training the model
1/1 [==============================] - 0s 101ms/step
[[44.602074]]
```

Out[31]:
```
[<matplotlib.lines.Line2D at 0x7f9d759abbe0>]
```



In [ ]:

In [ ]:

In [ ]: