```
#import tensorflow as tf
import tensorflow.compat.v1 as tf
tf.disable_v2_behavior()
```

```
WARNING:tensorflow:From /usr/local/lib/python3.6/dist-packages/tensorflow/python/compat/v2_cc
Instructions for updating:
non-resource variables are not supported in the long term
```

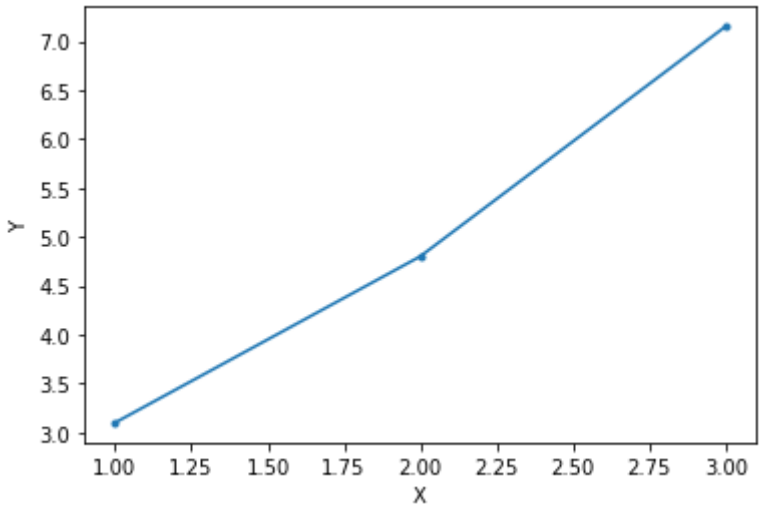
```
import numpy as np
import matplotlib.pyplot as plt

x_train = [1, 2, 3]

y_train = [2+1 +0.1, 4+1 -0.2, 6+1 +0.15]

plt.plot(x_train, y_train, '.-')
plt.xlabel('X')
plt.ylabel('Y')
```

```
Text(0, 0.5, 'Y')
```



초기화, Initialization

```
w0 = 7;
b0 = -10;
```

Parameter 설정

```
W = tf.Variable(w0*tf.ones([1]), name='weight')
b = tf.Variable(b0*tf.ones([1]), name= 'bias')
```

Our hypothesis XW+b

더블클릭 또는 Enter 키를 눌러 수정

```
hypothesis = x_train * W + b
```

cost/loss function

```
cost = tf.reduce_mean(tf.square(hypothesis - y_train))
```

Optimizer 설정

```
optimizer = tf.train.GradientDescentOptimizer(learning_rate=0.01)
#optimizer = tf.compat.v1.train.GradientDescentOptimizer(learning_rate=0.01)
train = optimizer.minimize(cost)
```

Launch the graph in a session

```
sess = tf.Session()
```

Initializes global variabels in the graph

```
sess.run(tf.global_variables_initializer())
```

RUN!

```
nb_epoch = 2000
```

```
for i in range(100):
  if i % 20 ==0:
    print(i)
```

```
0
20
40
60
80
```

```
vw = []
vb = []
vcost = []
```