In [1]:
```
x=2
lr=0.01
precision=0.000001
previous_step_size=1
max_iter=10000
iters=0
gf=lambda x: (x+3)**2
```

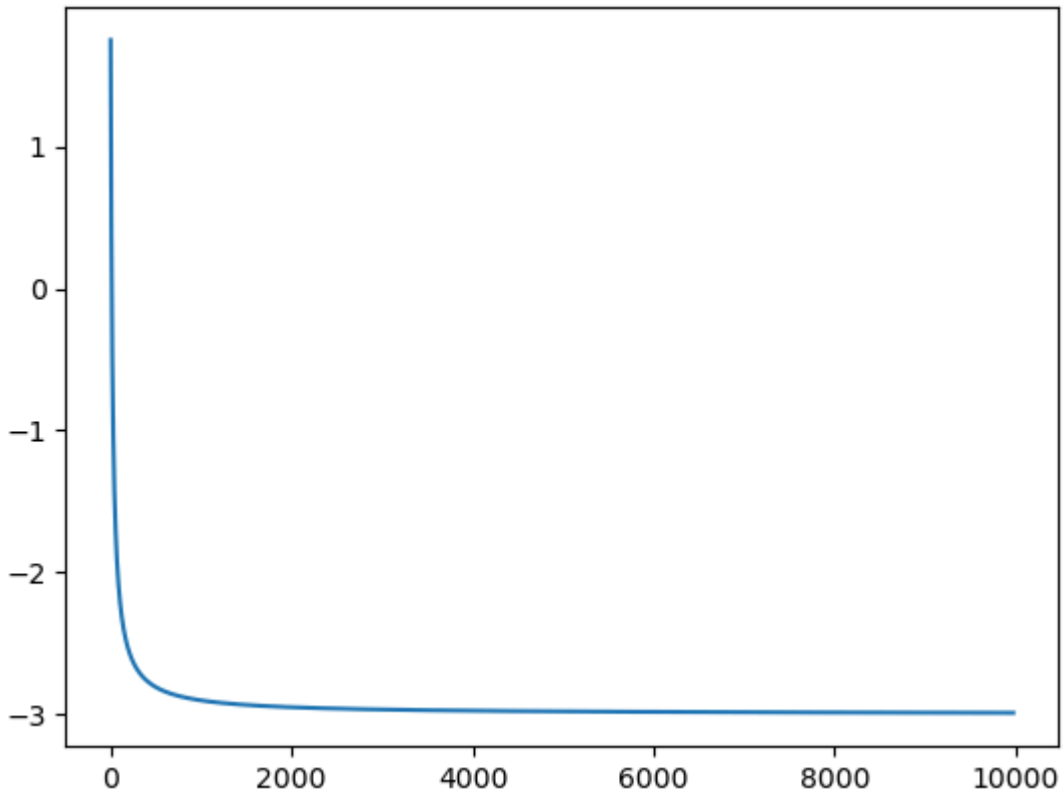
In [2]:
```
gd=[]
while precision<previous_step_size and iters<max_iter:
    prev=x
    x=x-lr*gf(prev)
    previous_step_size=abs(x-prev)`
    iters+=1
    gd.append(x)
    print("Iteration: ", iters," Value: ",x)
```

In [3]:
```
print("Local Minima:",x)
```

```
Local Minima: -2.990001240409911
```

In [4]:
```
import matplotlib.pyplot as plt
plt.plot(gd)
```

Out [4]:
```
[<matplotlib.lines.Line2D at 0x29466ae1e10>]
```



In [ ]:
```

```