

# GradientDescent

February 14, 2021

```
[15]: FirstX = 10
      learningRate = 0.1
      precisionRate = 0.000001
      stepSize = 1
      iterations = 100
      count = 0
      df = lambda x: (6*x)+2

      while stepSize > precisionRate and count < iterations:
          prevX = FirstX
          FirstX = FirstX - learningRate * df(prevX)
          stepSize = abs(FirstX - prevX)
          count = count+1

      print("global minimum occurs at x = ", FirstX)
```

global minimum occurs at x = -0.3333330492928295

[ ]:

[ ]:

[ ]: