## DS002.6.1 Statistics, Inference, Gradient Descent

Homework: finish the dice rolling lab from last week. How did it go?

— DS002\_rollingdice

newtemplateDS002\_rollingdic e



a new file: statistics.py

#### Use this template

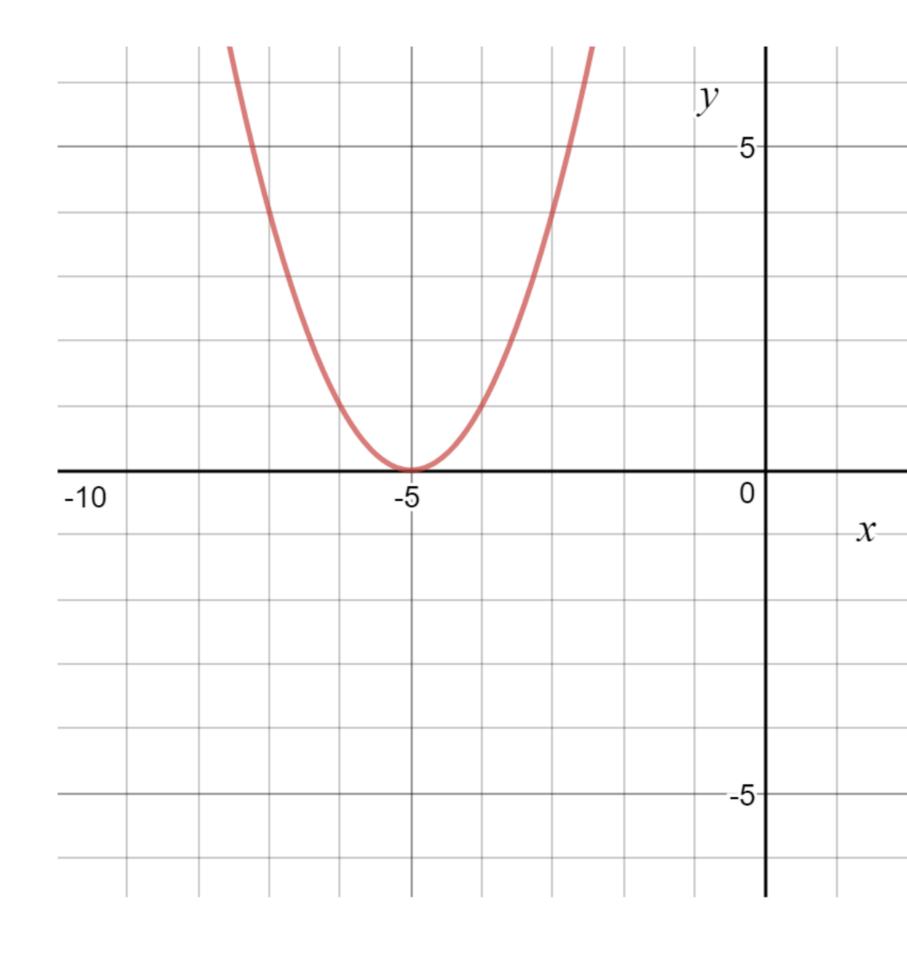
#### The file will contain:

```
mean()
mode()
median()
standard_deviation()
correlation()
```

Gradient Descent poresentation.

**Gradient Descent in Python** 

#### Gradient Descent



# Gradient Descent: What's the fastest way down from foggy mountain?

## Gradient Descent: What's the fastest way down from foggy mountain?

- 1. can't see down
- 2. look up to guess the steepest way down

### Gradient Descent: What's the fastest way down from foggy mountain?

- 1. How do you determine the steepest slope? (calculate slope)
- 2. What direction do you go? (gradient of the surface)
- 3. How far do you go down before looking up again? (~ Step size)