

# Lesson 5:

## Scrolls and App Icons



Instructor: Ahmet Geymen

# About this lesson

- Lesson 5:
  - More Kotlin fundamentals
    - High-order functions
- Workshop:
  - Scrollable list
  - App Icon

# Get started

## More Kotlin fundamentals

# Higher-order Functions

# High-order functions

- `forEach()`
- `maps()`
- `filter()`
- `groupBy()`
- `fold()`
- `sortedBy()`

# forEach()

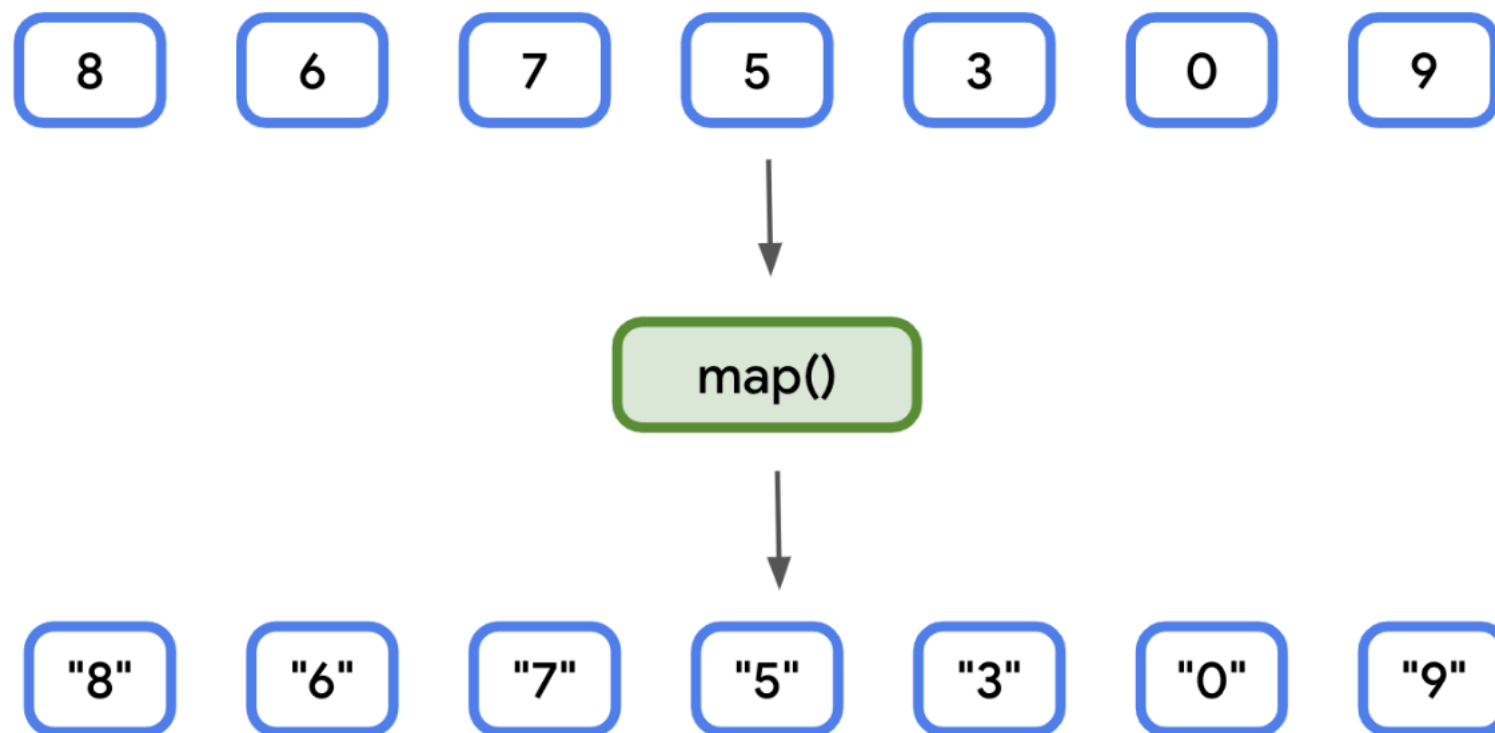
- Helps to iterate all items with in a collection
- Executes the function passed as a parameter once for each item

```
forEach(action: (T) -> Unit)
```

```
forEach { }
```

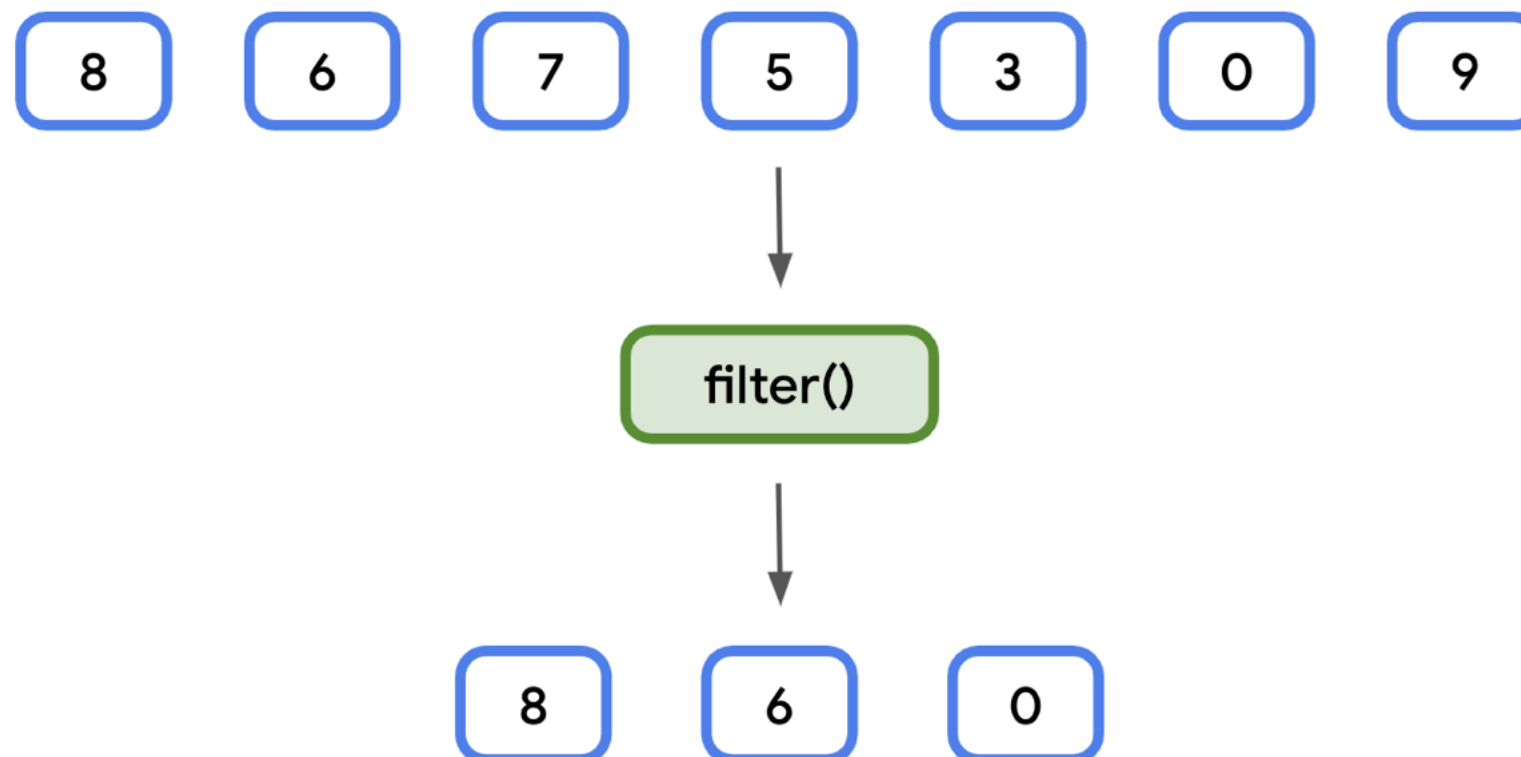
# map()

- Lets you transform a collection into a new collection



# filter()

- Lets you create a subset of a collection.



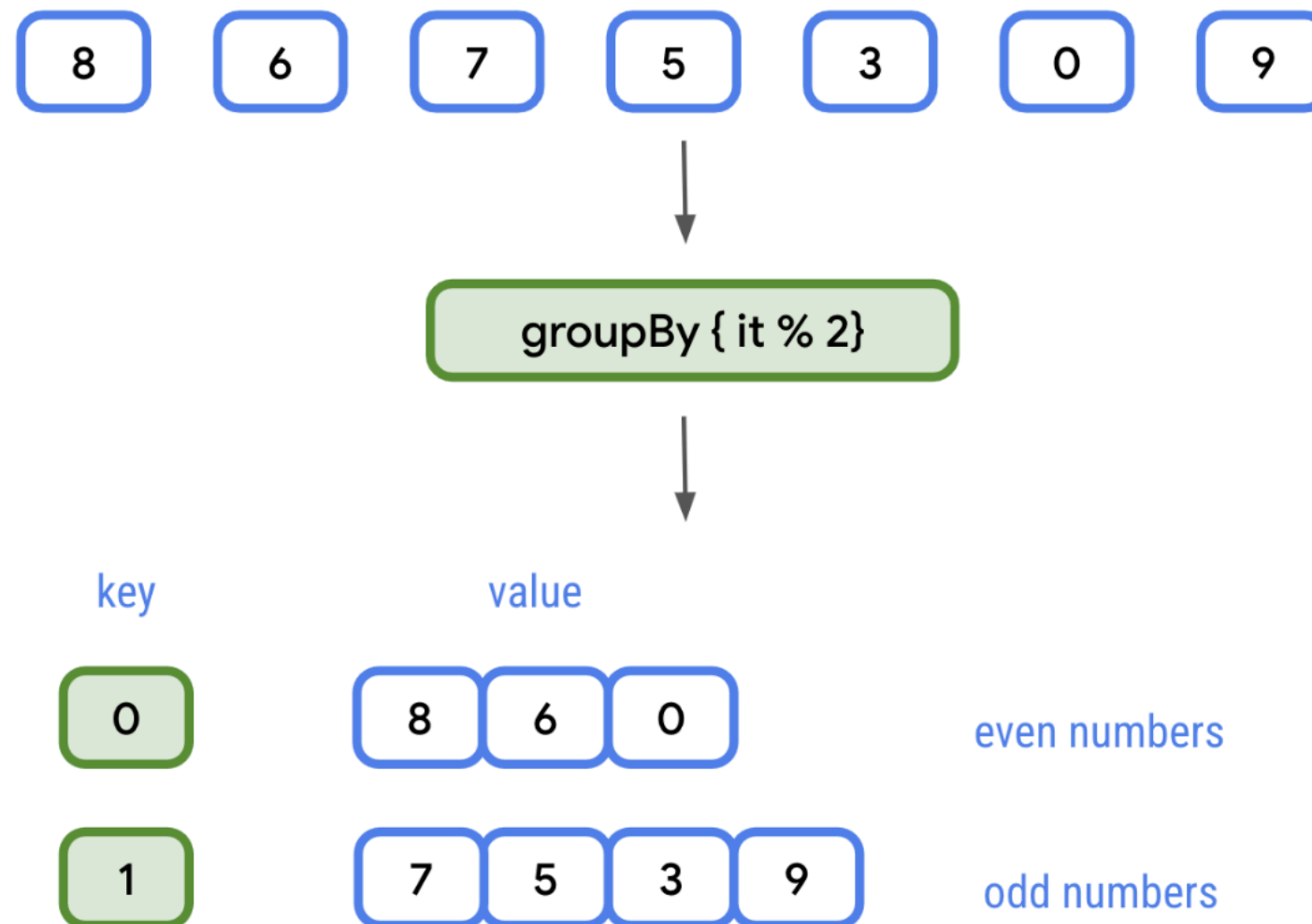


# groupBy()

- Can be used to turn a list into a map, based on a function
- Each unique return value of the function becomes a key in the resulting map
- The values for each key are all the items in the collection that produced that unique return value.

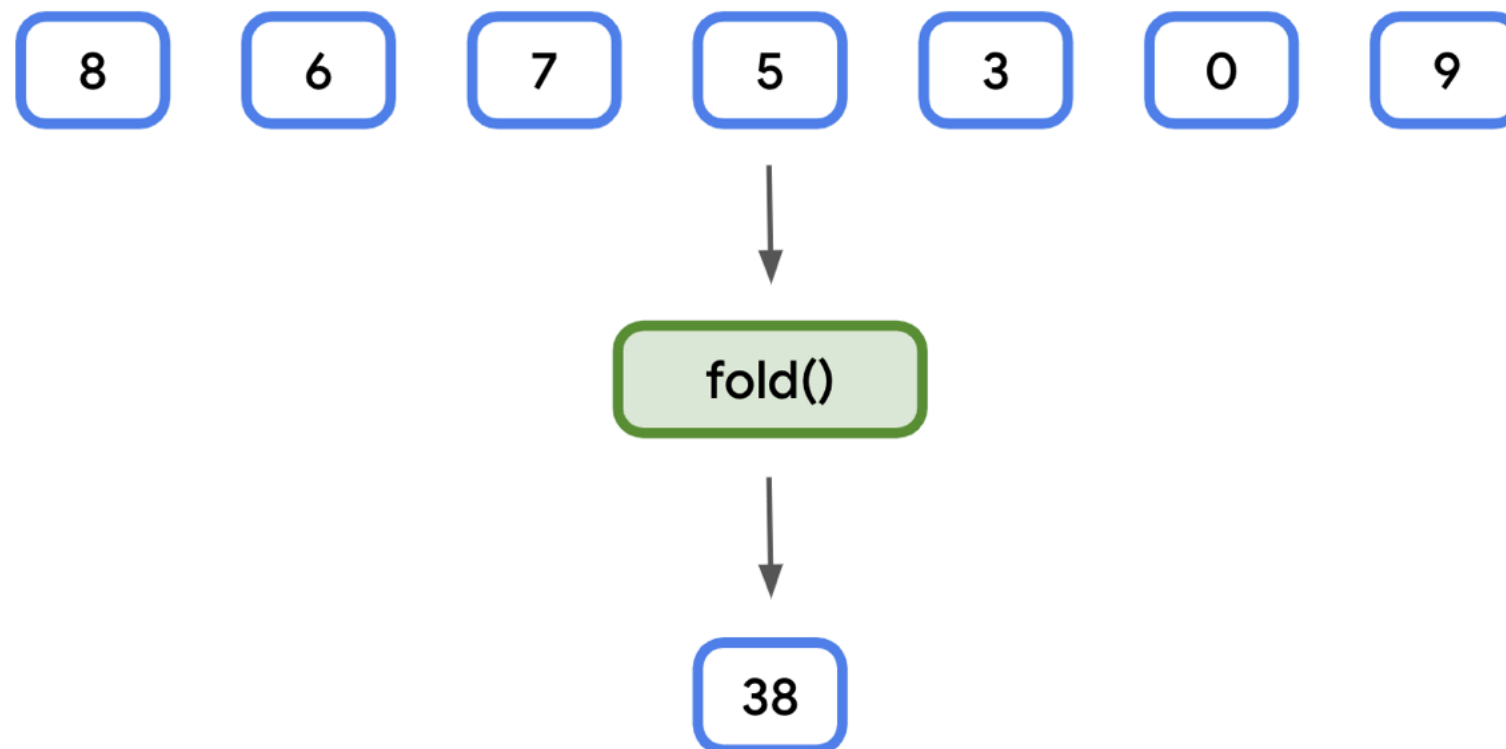


# groupBy()



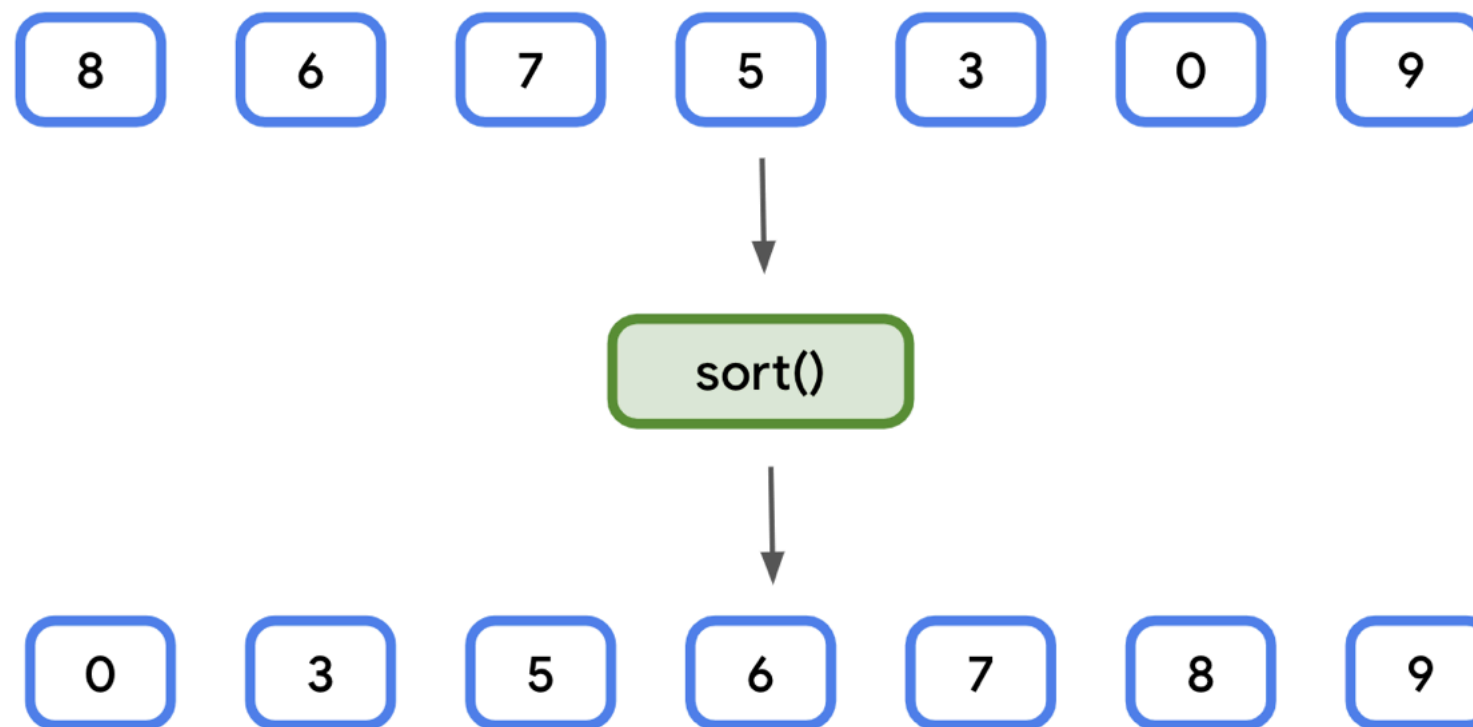
# fold()

- Used to generate a single value from a collection



# sortedBy()

- Lets you specify a lambda that returns the property you'd like to sort by



# Workshop