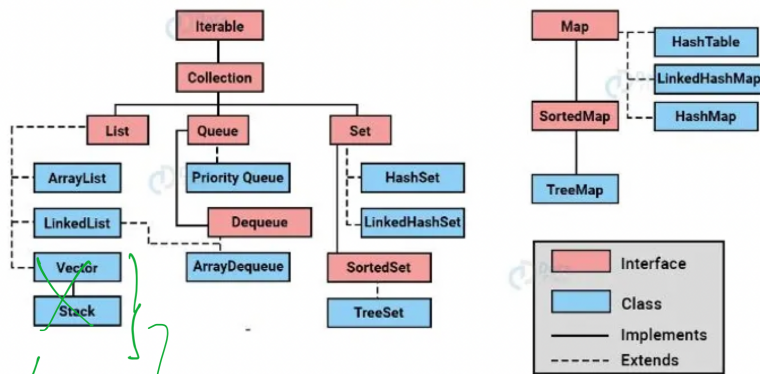


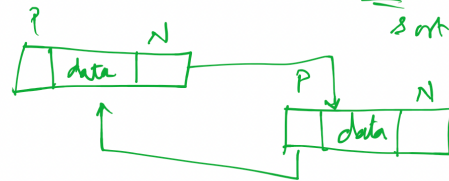
## Hierarchy of Collection Framework in Java



Comparable  
Comparator

Arrays  
Collections

Utility  
= sort, max, min



[3, 4, 8, 9, 11, 20, 40, 12]

```
filter(predicateFn) {
  result = [];
  for every elem in elems
    if(predicateFn(elem)) {
      add elem into result
    }
  end for
  return result;
}
```

$e \rightarrow e \% 2 == 0$

$e \rightarrow e.category().equals("computer");$

[4, 8, 20, 40, 12]

```
products.add(new Product(553, "LG AC", 45000.00, "electrical"));
products.add(new Product(81, "Macbook Pro", 245000.00, "computer"));
products.add(new Product(553, "iPhone 14", 89000.00, "mobile"));
products.add(new Product(61, "OnePlus Nord", 75000.00, "mobile"));
products.add(new Product(135, "Sony Bravia", 295000.00, "tv"));
products.add(new Product(5453, "Logitech Mouse", 800.00, "computer"));
```

```
List<Product> products = new ArrayList<>();
products.add(new Product(553, "LG AC", 45000.00, "electrical"));
products.add(new Product(81, "Macbook Pro", 245000.00, "computer"));
products.add(new Product(553, "iPhone 14", 89000.00, "mobile"));
products.add(new Product(61, "OnePlus Nord", 75000.00, "mobile"));
products.add(new Product(135, "Sony Bravia", 295000.00, "tv"));
products.add(new Product(5453, "Logitech Mouse", 800.00, "computer"));
```

```
products.stream()
  .filter(p -> p.getCategory().equals("computer"))
  .forEach(p -> System.out.println(p));
```

①

②