Iteration

- Functional programming supports Lamda/Closure.
- Prefer internal iteration to external iteration.
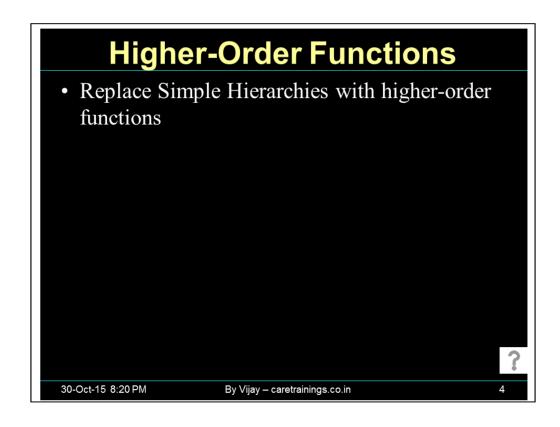
Iteration (Java)

```java
List<Integer> numbers =
    Arrays.asList(1, 2, 3, 4, 5, 6);
//External Iteration
for (Integer n : numbers)
    System.out.println(n);
//Internal iteration
numbers.stream().forEach(
    System.out::println);
```

Iteration (C#)

```csharp
var numbers = new List<int>
        {1, 2, 3, 4, 5, 6};
//External Iteration
foreach (var e in numbers)
    Console.WriteLine(e);


//Internal iteration
numbers.ForEach(Console.WriteLine);
```

Higher-order functions means a function that either accepts a function or returns a function.

If a hierarchy has only one abstract function, derived class has no instance variables and all classes are small, then replace hierarchy by higher-order function.

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