

Functions



Harit Himanshu

@harittweets



Overview



Structure of Functions

Anonymous Functions

Higher Order Functions



```
def functionName(argument: Type): ReturnType = {body}
```

Function Definition



Anonymous Functions

Also known as Function Literals

Do not have a name for the Function



```
(argument1: Type, argument2: Type) => body
```

Anonymous Function Structure



How to remember syntax?

```
def product(a: Int, b: Int) = a * b
```



How to remember syntax?

```
product(a: Int, b: Int) = a * b
```



How to remember syntax?

`(a: Int, b: Int) = a * b`



How to remember syntax?

$(a: \text{Int}, b: \text{Int}) \Rightarrow a * b$

Inputs

Output



Type detour

```
def filter(p: (A) ⇒ Boolean): List[A]
```

Scala' List *filter* API



Use of underscore

```
fruitBasket.filter(fruit => fruit.name == "apple")
```



Use of underscore

```
fruitBasket.filter(_.name == "apple")
```



underscore uses the
argument on left just once



Summary



Structure of Functions

Anonymous Functions

Higher Order Functions

