

# Leveraging the Power of Kotlin

---



**Sriyank Siddhartha**

AUTHOR

[linkedin.com/in/sriyank](https://www.linkedin.com/in/sriyank)

[sriyank.siddhartha@gmail.com](mailto:sriyank.siddhartha@gmail.com)



# Kotlin Power

**Extension  
Function**

**Default  
Parameters**

**Lambda  
Expressions**

**High Order  
Functions**

**Inline Functions**



```
fun display(x) {  
    print(x)  
}
```

1. `{ x -> print(x) }`
2. `{ (x, y) -> print(x + y) }`
3. `{ addNumbers() }`

## Lambda Expression: A function without name

**A lambda expression is always surrounded by curly brackets**

**Its parameters (if any) are declared before ->**

**The body(if any) goes after ->**



```
// Somewhere in class..
```

```
playTurn( { rollDice() }, "Player one turn" )
```

```
playTurn( { rollDiceTwice() }, "Player one bonus turn" )
```

```
fun playTurn(myFunc: () -> Unit, msg: String) {    // Higher-Order Function  
    myFunc()    // rollDice()    // rollDiceTwice()  
}
```

## Higher-Order Function

A function that accepts function as parameter

Or A function that returns a function



# Demo



Extensions Functions

Default Parameters

Lambda Expressions

Higher-Order Functions

Inline Functions



# Inline Functions

## Higher-Order Functions

- Disadvantages
  - The passed functions are stored as objects
  - Too much of its usage can affect memory and thus performance

## Inline Functions

- Makes affective use of memory
- Passed functions are no longer stored as objects
- The passed function expands at the call site thus reducing the call overhead



# Inline Functions

- Too much of its usage increases byte code
- Use it only for short methods or logical code
- Do not use it for large methods

