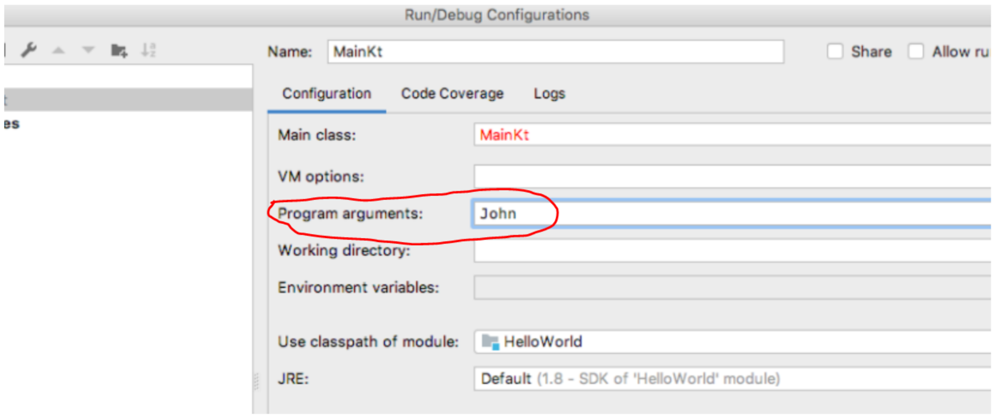
To input Command line arguments

Run -> Edit Configurations

Add the command line parameters in Program arguments as shown below and click apply. In this case, we have added a name "John".



Name: MainKt

Main class: MainKt

VM options:

Program arguments: John

Working directory:

Environment variables:

Use classpath of module: HelloWorld

JRE: Default (1.8 - SDK of 'HelloWorld' module)

Kotlin Data Types

```
// Mutable Data - var

var a: Int = 3  // Variables

var b = 6 // No need to specify the type. Kotlin infer the type from the value

println(a + b)

// Declaring various number types

   val doubleNum: Double = 123.45 //64 bit number

   val floatNum: Float = 123.45f // 32 bit

   val longNum = 1237819283712L // 64 bit

// String

 //Declaring String

var name: String = "Kotlin"  // Constant

   var hero: String

   hero = "batman"

   println(hero)

   hero = "superman"

   println(hero)
```

//Boolean

// Declaring Boolean

```
var isAwesome:Boolean = true

println("Is " + name + " awesome? The answer is : " + isAwesome)
```

// Declaring Constants – Immutable – Val

```
val value = 3.14959265358979323
```

Multiline Strings

```
val x: String = """Kotlin

            supports

            Multiline

            Strings"""

val x: String = """|Kotlin

            |supports

            |Multiline

            |Strings""".trimMargin()
```

```
val name : String = "Kotlin"  // Constant
//  name = name + " " + "Programming"
```

// String Template and Calling String methods

```
var x = "Kotlin"
println("Hello " + x )

println("Hello $x" )


val luke = "Luke Sky walker"
val lightSaberColor = "green"
val vehicle = "land speeder"
val age = 27
```

// Null Check

```
var username : String = "Anne Mathew"
//username = null


var nullableusername : String? = "Anne Mathew"
// nullableusername = null
```

// Traditional Approach

```
val l = if (nullableusername != null) nullableusername.length else -1
println(l)
```

// Safe Call operator – Do the functionality if not null, otherwise return null

```
println(nullableusername?.length)
```

// Print default value if null – Elvis operator ?:

```
val len = nullableusername?.length ?: -1
println(len)
val nousername = nullableusername ?: "No one knows me..."
println(nousername)
```

// !! Assertion Operator

```
var nodata : String? = "Hello"

    println(nodata?.length)
 //   nodata = null;
    //Not Null Assertion - !! ( Recommended to use only the input is not null)
//   println(nodata!!.toUpperCase())
```

// Functions

```
fun main(args: Array<String>) {
    val count = 5
    fun displayString() {
        for (index in 1..count) {
            println("Java")
        }
    }
// Calling the function
    displayString()

}
```

// Var args

```
fun main(args: Array<String>) {
    dStrings("one", "two", "three", "four")
   }
fun dStrings(vararg strings: String){
    for (string in strings) {
        println(string)
    }
}
```

// Default arguments

```
fun main(){
    // Valid calls
   var message = bmsg("Jack",50)
    println(message)
    message = bmsg("Jack")
    println(message)
    // Pass with argument name
    message = bmsg(count = 10) // Valid
  //  message = bmsg(10) // Inalid
}
fun bmsg(name: String = "Customer", count: Int = 0): String {
    return("$name, you are customer number $count")
}
```

// Single Expression Function

```
fun main(){
 println(sum(5,6))
    println(sum1(5,6))
    println(sum2(5,6))
}
// Regular Approach
fun sum(x:Int, y:Int) : Int{
    return x + y
}
// Kotlin Approach 1
fun sum1(x:Int, y:Int) : Int = x + y

// Kotlin Approach 2
fun sum2(x:Int, y:Int) = x + y
```

// Default Constructor

Person.kt

```
class Person {
    lateinit var name: String
    var age: Int = 0
    override fun toString(): String {
        return "$name, age = $age"
    }
}
```

TestPerson.kt

```
fun main(){
    var p1 = Person()
    var p2 = Person()
    p1.age = 50;
    p1.name = "Tom"
    println(p1)
    p2.age = 30;
    p2.name = "Vina"
    println(p2)
}
```

```
Class Person{
 Person( String name, int age ){
  This.name = name;
This.age = age;
}
Person(String name, int age, String Prof){
   This(name, age);
  This.prof = prof;
}
class MyParentClass {
int myProperty
MyParentClass(int myProperty){
this. myProperty = property;
 }
}
class MySubClass extends MyParentClass {
MySubClass(int myProperty) {
 super(myProperty)
}
}
class MySubClass(myProperty: Int) : MyParentClass(myProperty) {
}
```

Replace of void in Kotlin

`Unit` is an analogue of `void` in Java

```
fun f(): Unit {
    println("Nothing return can use Unit similar like Void")
}
// If there is no return type mentioned work as void
fun f1() {
    println("No return type similar like Void")
}
```

The `Nothing` type is used as a return type of functions that don’t terminate normally.

```
fun fail(message: String): Nothing
{ throw
IllegalStateException(message)
}
```