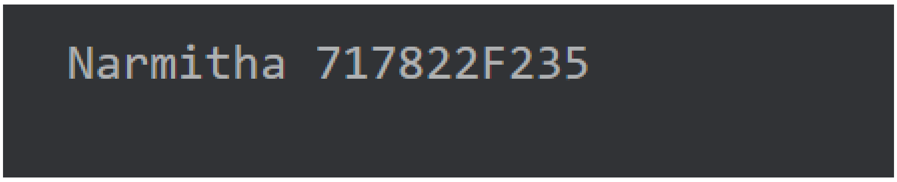
************* Kotlin **************

Printing Hello world

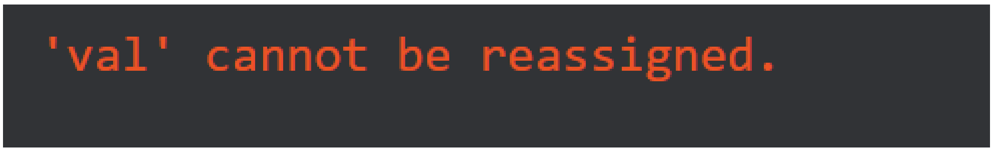
```
// printing hello world
fun main() {
    println("Narmitha 717822F235")
}
```



```
Narmitha 717822F235
```

```
// printing datatype
fun main() {
   var name=Alien()
   println(name.str)
}
class Alien
{
    var str:String?=""
}
o/p:null
```

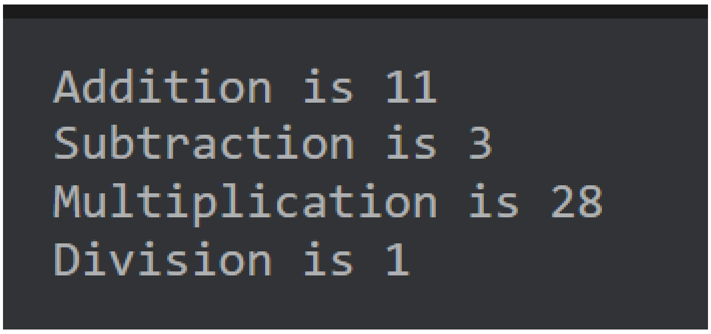
```
// printing Var,val
fun main() {
   var name=Alien()
   name.str="no"
   println(name.str)
}
class Alien
{
    val str:String?="nothing"
}
```



```
'val' cannot be reassigned.
```

// printing operator

```
fun main()
{
    var n1:Int=4
    var n2:Int=7
    println("Addition is ${n1+n2}")
    println("Subtraction is ${n2-n1}")
    println("Multiplication is ${n2*n1}")
    println("Division is ${n2/n1}")
}
```



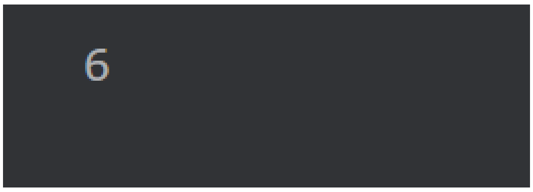
```
Addition is 11
Subtraction is 3
Multiplication is 28
Division is 1
```

// printing If-else

```
fun main()
{
  var n1:Int=4
    var n2:Int=6
    var r:Int=0
    if(n1>n2)
    r=n1
    else
    r=n2
    println(r)
}
```

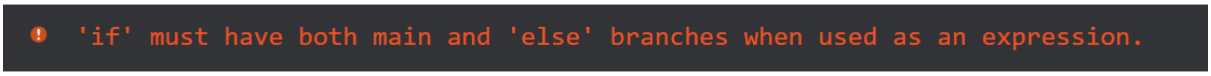
(or)

```
// printing If-else
fun main()
{
  var n1:Int=4
    var n2:Int=6
    var r:Int=0
   r= if(n1>n2)
   n1
    else
    n2
    println(r)
}
```



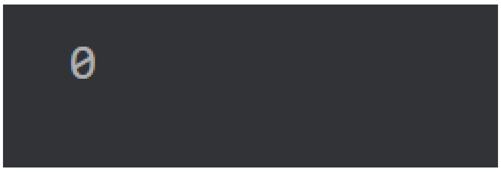
```
6
```

```
// printing If-elseif-else
fun main()
{
  var n1:Int=4
    var n2:Int=6
    var r:Int=0
   r= if(n1>n2)
   n1
    else if(n1<n2)
    n2

    println(r)
}
```



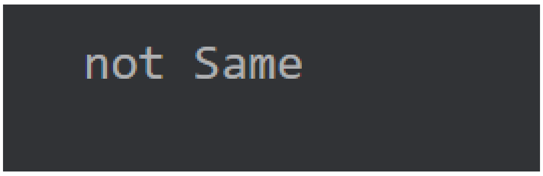
```
❗ 'if' must have both main and 'else' branches when used as an expression.
```

```
// printing If-elseif-else
fun main()
{
  var n1:Int=4
    var n2:Int=4
    var r:Int=0
   r= if(n1>n2)
   n1
    else if(n1<n2)
    n2
    else
    0
    println(r)
}
```



```
0
```

```
// Comparing two String .equals
fun main()
{
  var str1:String="Apple"
    var str2:String="apple"
    if(str1.equals(str2))
    println("Same")
    else
    println("not Same")
}
```

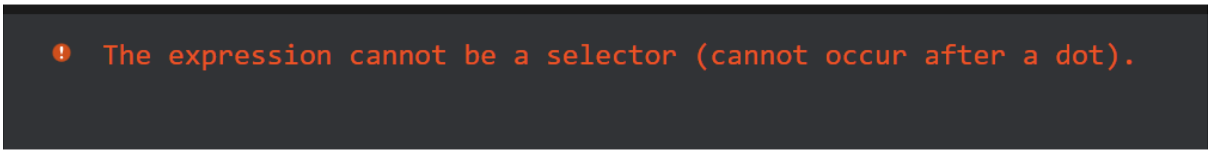


```
not Same
```

(or)

// Comparing two String .equals

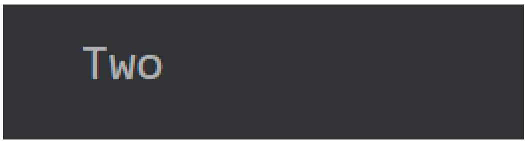
```
fun main()
{
  var str1:String="Apple"
    var str2:String="apple"
    if(str1.equals(str2.true))
    println("Same")
    else
    println("not Same")
}
```



```
The expression cannot be a selector (cannot occur after a dot).
```

//using when

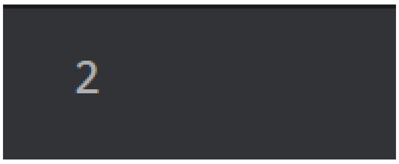
```
fun main()
{
  var num:Int=2
    when(num)
    {
        1->println("One")
        2->println("Two")
        3->println("Three")
        else->println("Nothing")

    }
}
```



```
Two
```

(or)

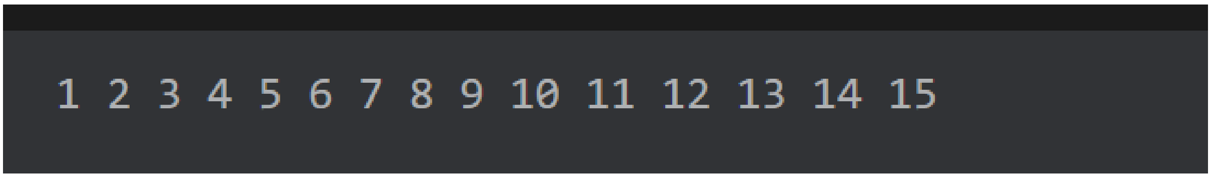
```
// using when
fun main()
{
  var num:Int=2
    when(num)
    {
        1->"one"
        2->"two"
        3->"Three"
        else->"Nothing"
    }
    println(num)
}
```



```
2
```

```
// using for
fun main()
{
  var num=1..15
    for(a in num)
    print(" $a")
}
```

```
// using for using until
fun main()
{
  var num=1 until 15
    for(a in num)
    print(" $a")
}
```

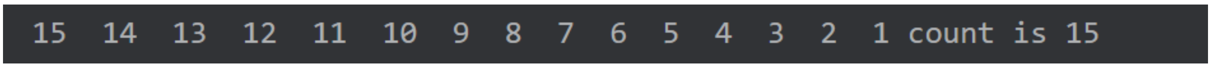


```
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
```

```
// using for using downTo(downTo->reverse the number)
fun main()
{
  var num=15 downTo 1
    for(a in num)
    print(" $a")
}
```

// using for using reversed() and count()

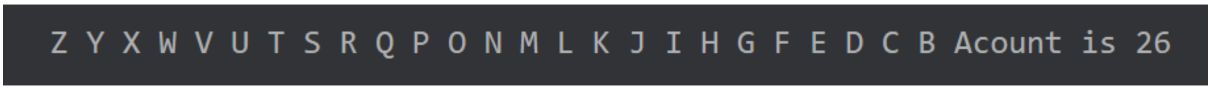
```
fun main()
{
  var num=1..15
    for(a in num.reversed()){
    print(" $a ")}
    println("count is ${num.count()}")
}
```



```
 15  14  13  12  11  10  9  8  7  6  5  4  3  2  1 count is 15
```

// using for using String

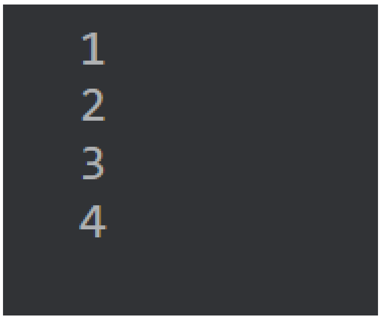
```
fun main()
{
  var num='A'..'Z'
    for(a in num.reversed()){
    print(" $a")}
    println("count is ${num.count()}")
}
```



```
 Z Y X W V U T S R Q P O N M L K J I H G F E D C B Acount is 26
```

// using list

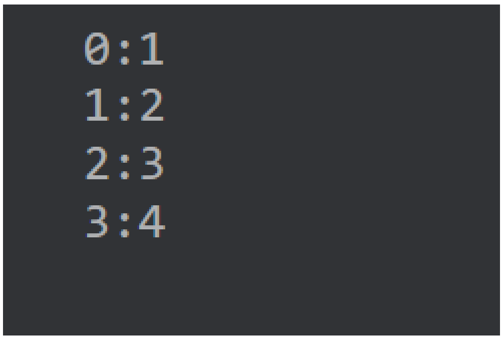
```
fun main()
{
 var num=listOf(1,2,3,4)
 for(i in num)//it prints elements
 println(i)

}
```



```
1
2
3
4
```

// using list (withIndex())

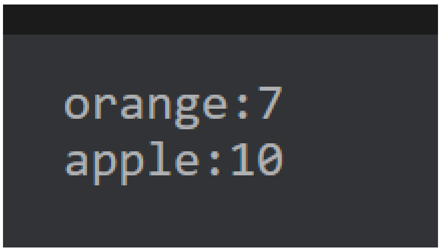
```
fun main()
{
 var num=listOf(1,2,3,4)
 for((i,e) in num.withIndex())//it prints elements
 println("$i:$e")
 }
```



```
0:1
1:2
2:3
3:4
```

// using map

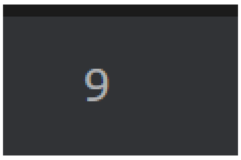
```
import java.util.*
fun main()
{
 var map=HashMap<String,Int>()
    map["apple"]=10
    map["orange"]=7
 for((i,e) in map)//it prints elements
 println("$i:$e")
}
```



```
orange:7
apple:10
```

// using functions

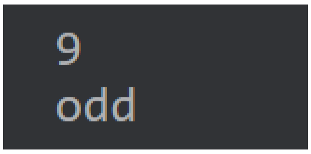
```
import java.util.*
fun main()
{
 add(4,5)
}
fun add(a:Int,b:Int)
{
    println(a+b)
}
```



```
9
```

ii)// using functions

```
import java.util.*
fun main()
{
 add(4,5)
 evenAndodd(7)
}
fun add(a:Int,b:Int)
{
   println(a+b)
}
fun evenAndodd(a:Int)
{
   if(a%2==0)
   println("even")
   else
   println("odd")
}
```



```
9
odd
```