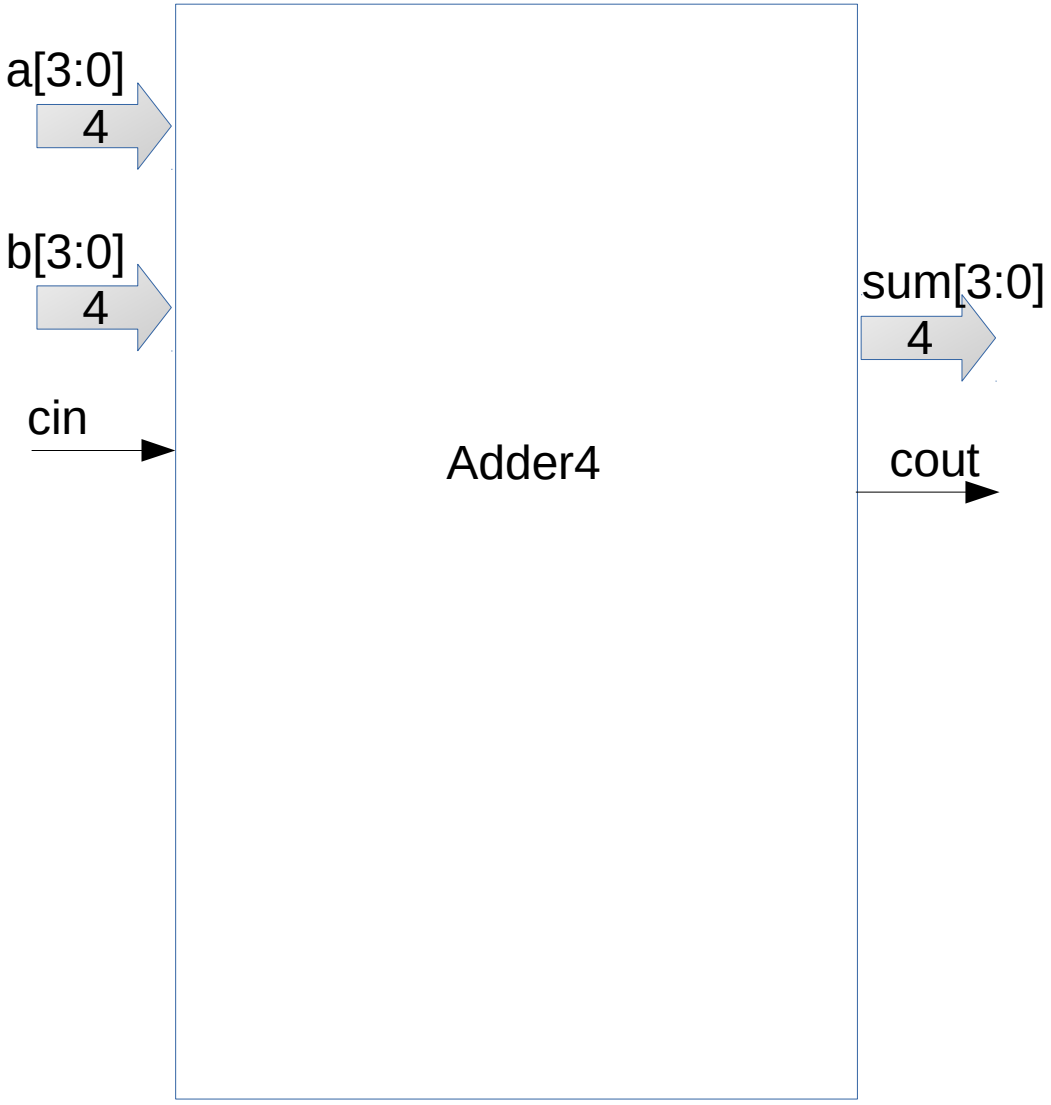
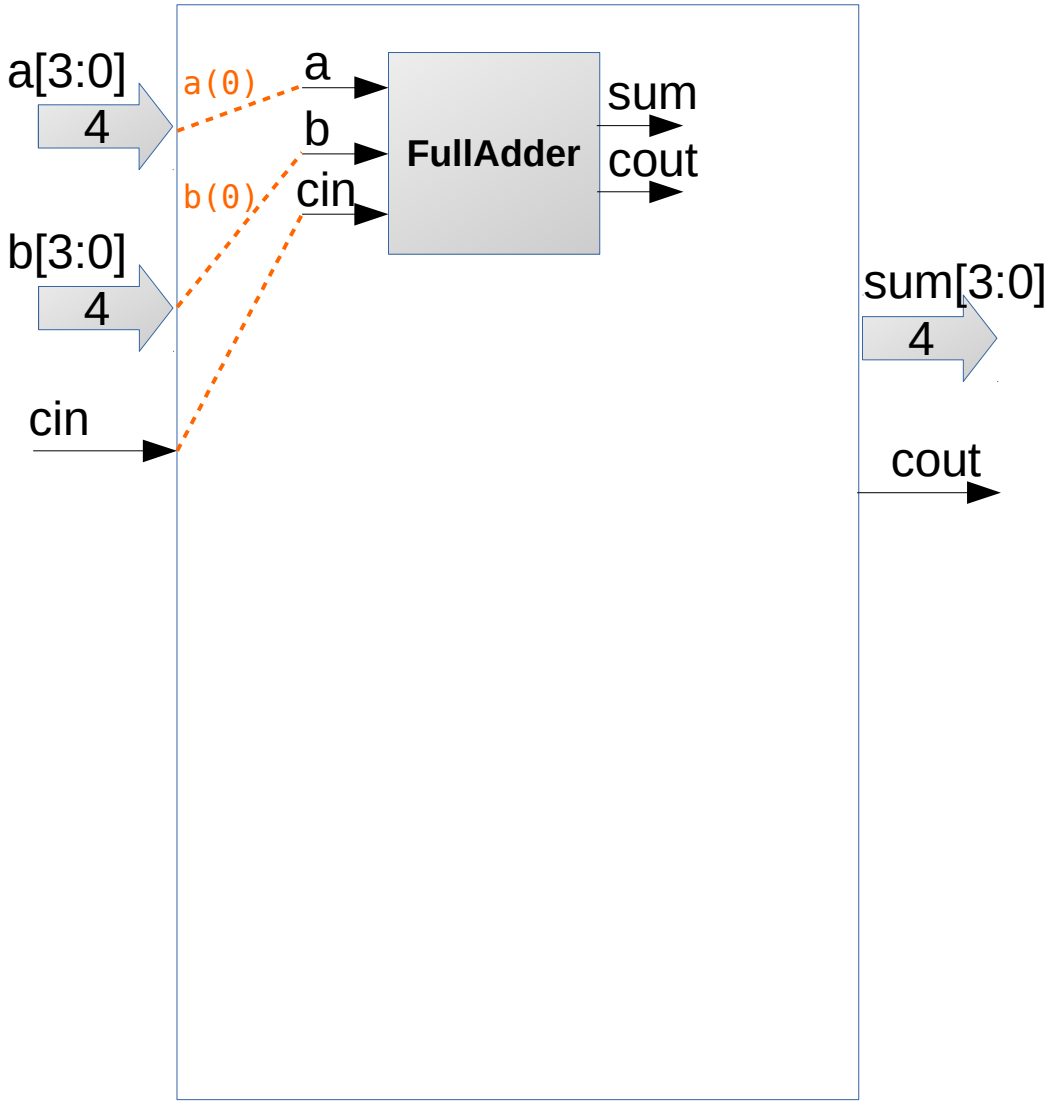
Υποδείξεις για το 3ο εργαστήριο

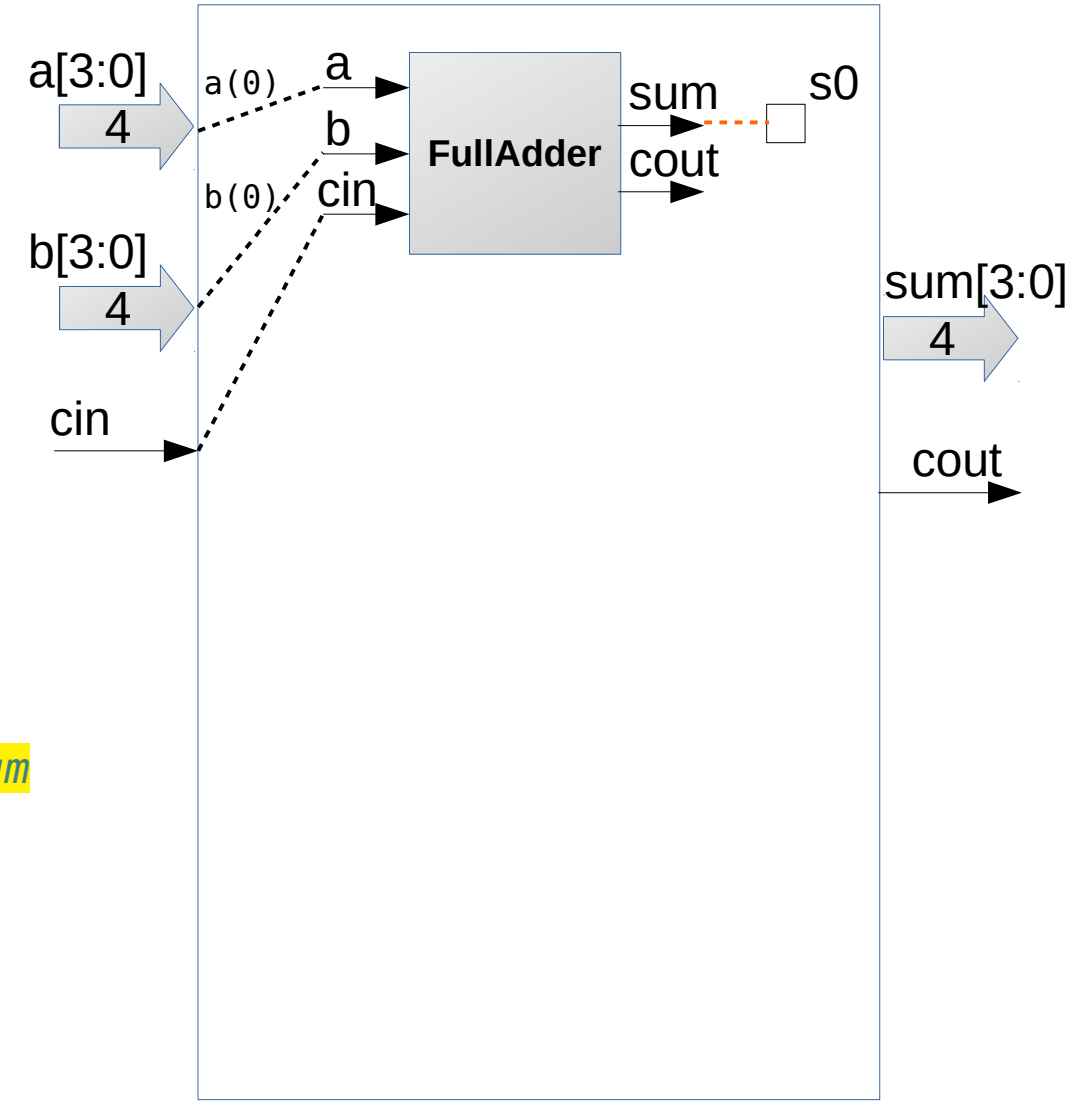
```scala
class Adder4 extends Module {
  val io = IO(new Bundle {
    val a = Input(UInt(4.W))
    val b = Input(UInt(4.W))
    val cin = Input(UInt(1.W))
    val sum = Output(UInt(4.W))
    val cout = Output(UInt(1.W))
  })
```



```
val adder0 = Module(new FullAdder())
adder0.io.a := io.a(0)
adder0.io.b := io.b(0)
adder0.io.cin := io.cin
```



```
val adder0 = Module(new FullAdder())
adder0.io.a := io.a(0)
adder0.io.b := io.b(0)
adder0.io.cin := io.cin
val s0 = adder0.io.sum
```

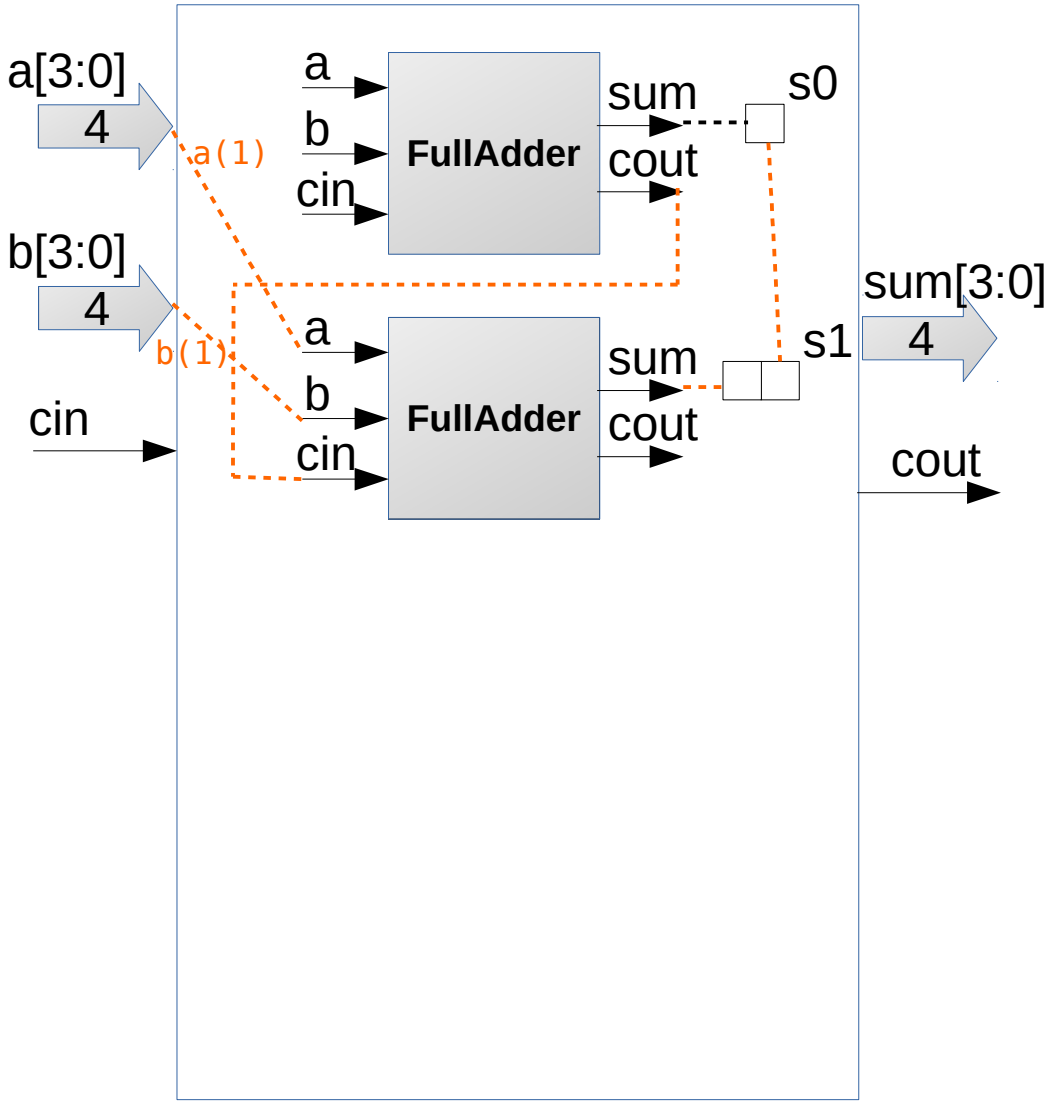


ΠΡΟΣΟΧΗ!! το io.sum(0) := adder0.io.sum
ΔΕΝ είναι σωστό και ΔΕΝ δουλεύει!!

```
val adder0 = Module(new FullAdder())
adder0.io.a := io.a(0)
adder0.io.b := io.b(0)
adder0.io.cin := io.cin
val s0 = adder0.io.sum

val adder1 = Module(new FullAdder())
// συμπληρώστε αντίστοιχα...
adder1.io.a := ???
adder1.io.b := ???
adder1.io.cin := ???
val s1 = Cat(adder1.io.sum,s0)
```

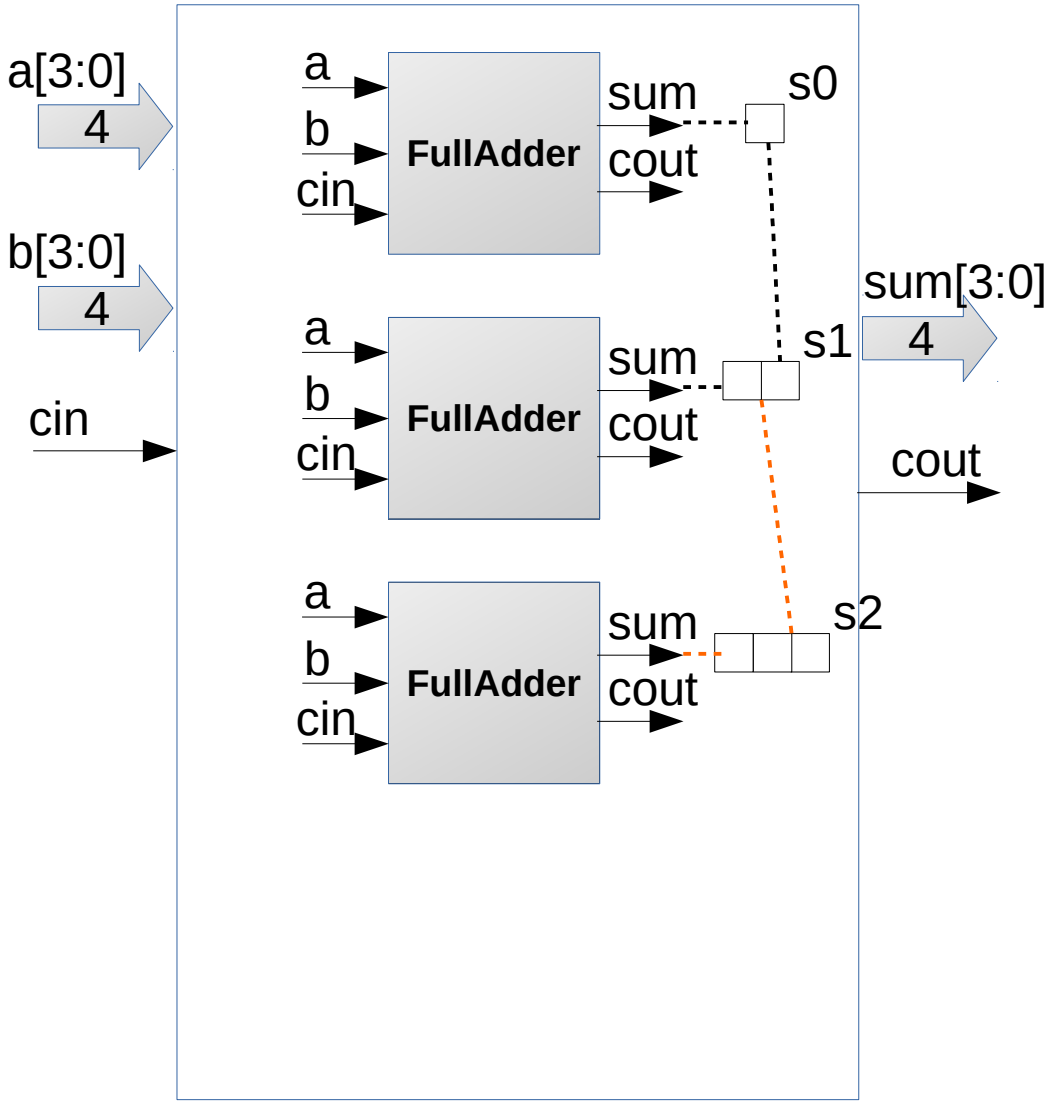
Cat(A,B): συνενώνει τα A και B



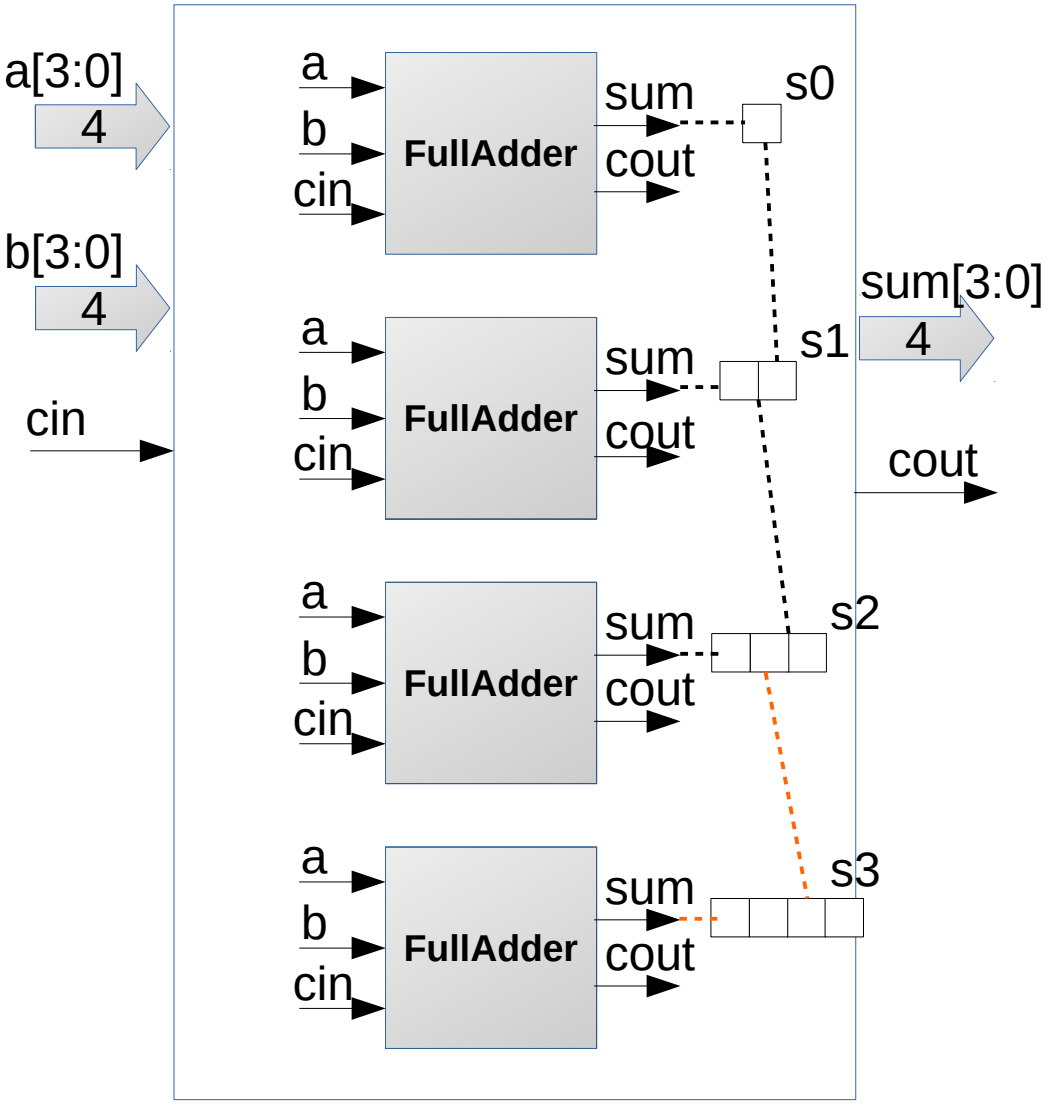
```
val adder0 = Module(new FullAdder())
adder0.io.a := io.a(0)
adder0.io.b := io.b(0)
adder0.io.cin := io.cin
val s0 = adder0.io.sum

val adder1 = Module(new FullAdder())
// συμπληρώστε αντίστοιχα...
adder1.io.a := ???
adder1.io.b := ???
adder1.io.cin := ???
val s1 = Cat(adder1.io.sum,s0)

val adder2 = Module(new FullAdder())
// συμπληρώστε αντίστοιχα…
adder2.io.a := ???
adder2.io.b := ???
adder2.io.cin := ???
val s2 = Cat(???)
```



```
val adder3 = Module(new FullAdder())
// συμπληρώστε αντίστοιχα…
adder3.io.a := ???
adder3.io.b := ???
adder3.io.cin := ???
val s3 = Cat(???)
```



```
  val adder3 = Module(new FullAdder())
  // συμπληρώστε αντίστοιχα…
  adder3.io.a := ???
  adder3.io.b := ???
  adder3.io.cin := ???
  val s3 = Cat(???)

  io.sum := ???
  io.cout := ???
}
```