Assignment 13.1 (Finding GCD of Two Numbers)

I have written a scala method gcd which takes two integer arguments and return an integer. This method first first finds greater of two numbers and assign to first\_number and second\_number respectively. Remainder is calculated by using modulus operator (%) between first\_number and second\_number. This steps is done repeated in while loop till remainder is 0. When remainder becomes 0, first\_number is returned as the gcd. Code is as below:

def gcd(a:Int, b:Int) : Int = {

var first\_number = 0

var second\_number = 0

if (a>b) {

first\_number = a

second\_number = b

} else {

first\_number = b

second\_number = a

}

var remainder = 1

while (remainder != 0) {

remainder = first\_number % second\_number

first\_number = second\_number

second\_number = remainder

}

return first\_number

}

Screenshot is as below:

