

Assignment 15.1

Task 1

Finding GCD of numbers

```
scala> def gcd(x: Int,y: Int): Int = {  
  |   if(x==0) y else gcd(y,x%y)  
  | }  
gcd: (x: Int, y: Int)Int  
  
scala>  
  
scala> def main(args: Array[String]) {  
  |   println(gcd(25,15))  
  | }  
main: (args: Array[String])Unit  
  
scala> println(gcd(25,15))
```

5

Task 2

Fibonacci series

program to find the fibonacci series

```
scala> def fib(n: Int, first: Int = 0, second: Int = 1): Int = {  
  |   if (n == 1)  
  |   return first  
  |   else  
  |   first+ fib(n-1,second,first + second)  
  | }  
fib: (n: Int, first: Int, second: Int)Int  
scala> println(fib(10))  
88
```

Finding the nth digit

for example 5th digit would be-

```
scala> println(fib(5))  
7
```