Lab sheet 2

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⊙ Subject	Functional Programming
⊙ Type	practical
🖉 Files	
🗓 Date	@July 10, 2022

GitHub Repository

https://github.com/TharinduEpaz/FP_lab_01

Question 1

```
object ScalaLab1_Question1{
    def main(args: Array[String]) = {
        var k,i,j = 2;
        var m,n =5;
        var f = 12.0f;
        var g = 4.0f;
        var c = 'X';

        println(k + 12 * m)
        println(m/j)
        println(n % j)
        println(m / j * j)
        println(f + 10*5 +g)
        //println(++i * n) //this is not working in scala language unlike c++ language.

    }
}
```

Question 2

```
object ScalaLab1_Question2{
    def main(args: Array[String]) = {

        var a = 1; var b = 2; var c = 4; var d = 5;
```

```
        var f = 4.3f;
        var k = 5.3f;
        // println( --b * a + c *d--);
        // println(a++);
        println (-2 * ( f - k ) +c);
        // println (c=c++);
        // println (c=++c*a++);

        //these commented out statements are not working in scala unlike c++


    }
}
```

Question 3

```
object ScalaLab1_Question3 {
  def main(args: Array[String]) = {
    println(salary(100,30));
  }

  def salary(hours: Int, OT: Int):Int = hours * 250 + OT * 85;

  def tax(income: Int):Double = income * 0.12;

  def takeHome(hours: Int,OT: Int):Double = salary(hours,OT) - tax(salary(hours, OT));


}
```

Question 4

```
object ScalaLab1_Question3 {
  def main (args: Array[String]) = {

    println(profit(25), profit(30), profit(35));

  }
  def cost(price : Int):Int = 500 + (120 + ((15 - price)/5)*20) * 3;

  def total_revenue(price : Int):Int = price * (120 + ((15 - price)/5)*20);

  def profit(price : Int):Int = total_revenue(price) - cost(price);

}
```