

LAB EXPERIMENT – 8

Q1. `println("BatMaTSatRatIn".drop(3).take(7).replace("t", "s"))`
`println(List(1,2,3).flatMap(x=>List(x,4, x*2)))`

Output:

MaTSasR

List(1, 4, 2, 2, 4, 4, 3, 4, 6)

Q2. `def quadruple(x:Int):Int=x*4`
`val quadrupleCopy=quadruple _`
`println(quadrupleCopy(-1) + quadruple(2))`

Output:

4

Q3. `val fruits = List("mango", "apple", "pear")`
`val fruits1=fruits.updated(1, "orange")`
`println(fruits.flatMap(_.toUpperCase))`
`println(fruits1.filter(_.take(1)=="o"))`

Output:

List(M, A, N, G, O, A, P, P, L, E, P, E, A, R)

List(orange)

Q4. `println("Functionalprogram".take(6).toUpperCase.drop(3))`

`println(List('x', 'yy', 'zzz').flatMap(l=>List(l, l.length)))`

Output:

CTI

`List(x, 1, yy, 2, zzz, 3)`

Q5. `var rrr= List("ant", "beer", "battered", "cool", "burger")`

`rrr.filter {(w: String) =>w.take(1) == "b"}.reduceLeft{(a: String, b: String) =>s"$a $b"}`

Output:

`beer battered burger`

Q6. `object Whatever{`

`def speak(something: String)(implicit nice: String) = {println(s"$something $nice")}`

`}`

`implicit val nice= "the walrus"`

`println{Whatever.speak("I am")}`

`println{Whatever.speak("I like")("catfood")}`

Output:

`I am the walrus`

`()`

`I like catfood`

`()`

Q7. `val s = "Scala programming is fun"`

```
val result = s.split(" ").map(_.reverse) .mkString(" ")
```

```
println(result)
```

Output:

```
alacS gnimmargorp si nuf
```

Q8.`val numbers = List(5, 10, 15, 20)`

```
val result = numbers.reduce((x, y) => x * y)
```

```
println(result)
```

Output:

```
15000
```