LAB EXPERIMENT 7

Q. Practice Scala collections and their methods:

1. Lists

2. Sets

3. Tuples

4. Maps

5. Options

Solution:

(1)LISTS:

```scala
object ListsMain {
  def main(args: Array[String]): Unit = {
    val list = List(1, 2, 3, 4, 5)
    val newList = list.map(_ * 2)
    println(newList)
  }
}
//VaswatiGogoi_500110490
```

Output:

```
Output:

List(2, 4, 6, 8, 10)
```

(2) SETS:

```scala
object SetsMain {
  def main(args: Array[String]): Unit = {
    val set1 = Set(1, 2, 3)
    val set2 = Set(3, 4, 5)
    val intersection = set1.intersect(set2)
    println(intersection)
  }
}

//VaswatiGogoi_500110490
```

Output:

```
Output:

Set(3)
```

(3)TUPLES:

```scala
object TuplesMain {
  def main(args: Array[String]): Unit = {
    val tuple = (1, "hello", true)
    println(tuple._2)
  }
}

//VaswatiGogoi_500110490
```

```

hello
```

(4)MAPS:

```scala
object MapsMain {
  def main(args: Array[String]): Unit = {
    val map = Map("a" -> 1, "b" -> 2, "c" -> 3)
    println(map.get("a"))
  }
}

//VaswatiGogoi_500110490
```

Output:

```
Output:

Some(1)
```

(5) OPTIONS:

```scala
object OptionsMain {
  def main(args: Array[String]): Unit = {
    val maybeValue: Option[Int] = Some(42)
    val result = maybeValue.getOrElse(0)
    println(result)
  }
}

//VaswatiGogoi_500110490
```

Output:

42