

Assignment Topic: Collections

B1. WAP to create map instance and store values with State, City pair. Also print all value using loop. (HashMap)

```
fun main() {
    var map:HashMap<Int,String> = HashMap()
    map[1] = "pratik"
    map[2] = "Hardik"
    map[3] = "Rahul"
    for (i in map){
        println(i)
    }
}
```

B2. WAP to assign name and age to User class instance from properties of map. (properties in map)

```
class user(var name:String,var age:Int) {
    init {
        println("$name $age")
    }
}
fun main() {
    var map:HashMap<Int,String> = HashMap()
    map[21] = "pratik"
    map[22] = "Hardik"
    map[23] = "Rahul"
    for (i in map.keys){
        val a = user(map[i].toString(),i)
    }
}
```

B3. Kotlin Program to Join Two Lists

```
fun main() {
    var l1 = mutableListOf(1,2,3,4,5)
    var l2 = mutableListOf(6,7,8,9,10)
    l1.addAll(l2)
    for (i in l1){
        println(i)
    }
}
```

B4. Kotlin Program to Convert List (ArrayList) to Array and Vice-Versa

```

fun main() {
    var l1:MutableList<Int> = ArrayList()
    l1.add(1)
    l1.add(2)
    l1.add(3)
    var l2 = arrayOf(4,5)
    l1.addAll(l2)
    println(l1)
}

```

B5. Kotlin Program to Convert Map (HashMap) to List

```

fun main() {
    var map:HashMap<Int,String> = HashMap()
    map[21] = "pratik"
    map[22] = "Hardik"
    map[23] = "Rahul"
    var l1 = mutableListOf<String>()
    for (i in map.keys){
        l1.add(map[i].toString())
    }
    println(l1)
}

```

B6. Kotlin Program to Convert Array to Set (HashSet) and Vice-Versa

```

fun main() {
    var arr = arrayOf(1,2,3,4,4,6,6,6)
    var set:HashSet<Int> = hashSetOf()
    for (i in arr){
        set.add(i)
    }
    println(set)
}

```

B7. Kotlin Program to Sort a Map By Values

```

fun main() {
    var arr = arrayOf(6,6,5,7,3,4,2,8,1,10)
    var set:HashSet<Int> = hashSetOf()
    for (i in arr){
        set.add(i)
    }
    set.sorted()
    println(set)
}

```

