TECNOLÓGICO NACIONAL DE MÉXICO
INSTITUTO TECNOLÓGICO DE TIJUANA
Subdirección Académica
Departamento de sistemas y computación

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Carrera:
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Materia:
Datos Masivos

Nombre del trabajo:
Práctica 3

UNIDAD A EVALUAR:
Unidad I

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NOMBRE DEL MAESTRO (A):
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1. Create a list called "list" with the elements "rojo", "blanco", "negro"
We create the list with the elements mentioned above and with the toSet method we transform the list into a set.

```
val list = List ("rojo", "blanco", "negro")
println (list)
```

2. Add 5 more items to "list" "verde", "amarillo", "azul", "naranja", "perla"
here we save the value in a variable and add it to the beginning of the list

```
val e1 = "verde" :: list
val e2 = "amarillo" :: e1
val e3 = "azul" :: e2
val e4 = "naranja" :: e3
val e5 = "perla" :: e4
```

3. Bring the items from "list" "verde", "amarillo", "azul"
We declare the list that we are going to use and with the list.slice command we show a sublist where only the elements that are in the positions that we established in the range will be, it starts at 3 and goes up to 6

```
var list = List ("rojo", "blanco", "negro", "verde", "amarillo", "azul",
"naranja", "perla")
list.slice (3,6)
```

4. Create a number array in the range 1-1000 in steps of 5 by 5
We create the matrix including the range from 1 to 1000 and with the by method we tell it that we want the jumps from 5 to 5, we add a for loop to display them
.

```
val array = (1 to 1000) .by (5)
    for (i <- array) {
        println ("" + i)

    }
```

5. What are the unique elements of the list List (1,3,3,4,6,7,3,7) use conversion to sets

We create the list with the elements mentioned above and with the toSet method we transform the list into a set.

```
var List = List (1,3,3,4,6,7,3,7)
List.toSet
```

6. Create a mutable map named names that contains the following
"Jose", 20, "Luis", 24, "Ana", 23, "Susana", "27"

```
val names = collection.mutable.Map (("Jose", 20), ("Luis", 24), ("Ana",
23), ("Susana", "27"))
```

6 a. Print all keys on the map

We print all the map data, with the keys method only the string data is printed, and with the values method we print the numerical values

```
Names
names.keys
names.values
```

6 b. Add the following value to the map ("Miguel", 23)

With the option + = we can add the new data to the existing map since, being mutable, it allows us to edit it, in addition to printing all the map keys

```
names + = ("Miguel" -> 23)
Names
names.keys
names.values
```