(1A)

```
fun main() {
    1)  var number: Int
        // continue
        if (number <= 30)
        println(number)
        }
    2)  var num : Int
        if (num <= 10)
        println(num) 9
        // continue
         }
    3)  var hen: Int = 20
        // continue
        if (hen == 20)
        println(hen)
        }
    4)  var count : Int = 21
        if (count == 21)
        println(count)
        }
    5)  var num : Int = 49
        if (num > 22)
        println(num)
        // break
        }
    6)  var num : Int = 51
        if (num > 33)
        println(num)
         }
    7)  var num : Int = 60
        if (num = 60)
         println(num)
         }
    8)  var num : Double = 45.66
        if (num < 60)
        println(num)
         }
    9)  val count: Double = 5.668
         if (count > 4.4 )
        println(count)
        }
    10) val count: Double = 77.7
        if (count > 65.4 )
```

```
        println(count)
        }
```

(1B)

```
fun main() {
    1)  // conditional expression
var footballersName: String = "Messi"
var result : String = when {
footballersName == "Mount" -> "Is The Best"
footballersName == "Havertz" -> "Commands The Attack"
footballersName == "Azpi" -> "Is The Captain"
footballersName == "Mendy" -> "Catches The Ball"
footballersName == "Messi" -> "Takes Free Kick"
else -> "Invalid footballers name"
}
println(result)
}
    2)  // conditional expression
var nameOfSuperHeros: String = "Hulk"  var result : String = when { nameOfSuperHeros ==
"Thor" -> "Commands Lightening" nameOfSuperHeros == "Captain America" -> "Is The Leader"
nameOfSuperHeros == "Hulk" -> "Is Very Strong"
nameOfSuperHeros == "Iron Man" -> "Is The Flying Machine"
nameOfSuperHeros == "Black Panther" -> "Has Vibranium"
 else => "Invalid name of super hero"
}
println(result)
}

    3)  // conditional expression
var virtueOfStudent : String = "Cain"
var result : String = when {
virtueOfStudent == "Eve" -> "Smart" virtueOfStudent == "Cain" -> "Stubborn" virtueOfStudent
== "Abel"-> "Humble" virtueOfStudent == "Adam" -> "Nice"
else -> "Invalid virtue of student"
}
 println(result)
}

    4)  // conditional expression
 var typesOfUntensil: String = "Fork"
 var result : String = when {
typesOfUntensil == "Fork" -> "Yam" typesOfUntensil == "Spoon" -> "Soup" typesOfUntensil ==
"Knife" -> "Meat"
typesOfUntensil == "Teaspoon" -> "Tea"
```

```
else -> "Invalid type of utensil"
}
println(result)
 }
```

5) // conditional expression {

```
var monthOf Year: String = "June"
var result: String = when {
monthOfYear == "January" -> "Drive" monthOfYear == "March" -> "Exercise" monthOfYear ==
"June"-> "Party"
monthOf Year == "August" -> "Travel"
else -> "Invalid month of year"
}
println(result)
}
```

2) **Method 1**

```
fun main() {
val count : Int = 0
for (count in 1..100) {
println(count)
}
}
```

Method 2

```
fun main() {
var count : Int = 0
for (count in 1..100)
println(count)
count = count +1 // count++
}
```

4)

```
class Man{
    var name : String = "Ade"
    var age : Int = 12000
    var salary : Double = 5446.87
    var initial : Char = "A"
    var carType : String = "BeNZ

constructor(name : String, age : Int, salary : Double, initial : Char, carType : String)

this.name = name
this.age = age
this.salary = salary
this.initial = initial
```

this.carType = carType