Basic Scala Programs

1.Even odd Check

```
object EvenOddCheck {
  def main(args: Array[String]): Unit = {
    val number = 15
    if (number % 2 == 0) {
      println(s"$number is even")
    } else {
      println(s"$number is odd")
    }
  }
}
```

2.Factorial

```
object Factorial {
  def main(args: Array[String]): Unit = {
    val num = 5
    var factorial = 1
    for (i <- 1 to num) {
      factorial *= i
    }
    println(s"The factorial of $num is $factorial")
  }
}
```

3.Reverse the String

```
object ReverseString {
  def main(args: Array[String]): Unit = {
    val str = "Scala"
    val reversed = str.reverse
    println(s"The reverse of '$str' is '$reversed'")
  }
}
```

4. Find the largest element in array

```
object FindLargest {
  def main(args: Array[String]): Unit = {
    val numbers = Array(10, 20, 30, 40, 50)
    val largest = numbers.max
    println(s"The largest number in the array is $largest")
  }
}
```

5.Sum of Two Numbers

```
object SumOfTwoNumbers {
  def main(args: Array[String]): Unit = {
    val num1 = 10
    val num2 = 20
    val sum = num1 + num2
    println(s"The sum of $num1 and $num2 is $sum")
  }
}
```

6.Add Two Numbers (with User Input)

```
import scala.io.StdIn

object AddTwoNumbers {
  def main(args: Array[String]): Unit = {
    println("Enter the first number:")
    val num1 = StdIn.readInt()

    println("Enter the second number:")
    val num2 = StdIn.readInt()

    val sum = num1 + num2
    println(s"The sum of $num1 and $num2 is $sum")
  }
}
```

7.Simple Calculator

```
import scala.io.StdIn

object SimpleCalculator {
  def main(args: Array[String]): Unit = {
    println("Enter the first number:")
    val num1 = StdIn.readDouble()

    println("Enter an operator (+, -, *, /):")
    val operator = StdIn.readChar()

    println("Enter the second number:")
    val num2 = StdIn.readDouble()

    val result = operator match {
      case '+' => num1 + num2
      case '-' => num1 - num2
      case '*' => num1 * num2
      case '/' => if (num2 != 0) num1 / num2 else "undefined (division by zero)"
      case _   => "Invalid operator"
    }
```

```
    println(s"The result is: $result")
  }
}
```