

# Assignment On Scala

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**Subject:** Data Science

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## Code:

```
object Hello {  
  def main(args: Array[String]) = {  
    println("Hello, world")  
    println("What you want to do...")  
    println("Enter 1 for addition\nEnter 2 for even_odd\nEnter 3 for area of  
sqaure")  
    var choice = scala.io.StdIn.readLine().toInt  
    if (choice == 1){  
      add()  
    }  
    else if(choice == 2){  
      even_odd()  
    }  
    else if(choice == 3){  
      println("Enter side of sqaure: ")  
      var side = scala.io.StdIn.readLine().toInt  
      var area = area_of_square(side)
```

```
        println("Area of Square of side ", side, " is ", area)
    }else{
        println("Please Enter Valid input.")
    }

}
```

```
def add()={
    println("Enter Number: 1 ")
    var a = scala.io.StdIn.readLine().toInt
    println("Enter Number 2: ")
    var b = scala.io.StdIn.readLine().toInt
    println("Addition is: ")
    println(a+b)
}
```

```
def even_odd()={
    println("Enter Number to check even odd: ")
    var a = scala.io.StdIn.readLine().toInt
    if (a % 2 == 0){
        println(a, " is Even Number")
    }
    else{
        println(a," is Odd Number")
    }
}
```

```
def area_of_square(side: Float):Float ={  
    return (side * side)  
  
}  
  
}
```

## Output:

The screenshot shows a web browser window with the URL <https://onecompiler.com/scala/3z8ntu97s>. The code editor displays a Scala program named `HelloWorld.scala`. The program defines a `Hello` object with a `main` method. The `main` method prints "Hello, world" and "What you want to do...". It then prompts the user to enter a choice (1 for addition, 2 for even\_odd, 3 for area of square). The user has entered 1, 2, and 3 in the STDIN input field. The output shows the program's response to these inputs: "Hello, world", "What you want to do...", "Enter 1 for addition", "Enter 2 for even\_odd", "Enter 3 for area of square", "Enter Number: 1", "Enter Number 2:", "Addition is:", and "5". A warning message at the bottom indicates a deprecation warning.

```

1 object Hello {
2   def main(args: Array[String]) = {
3     println("Hello, world")
4     println("What you want to do...")
5     println("Enter 1 for addition\nEnter 2 for even_odd\nEnter 3 for area of square")
6     var choice = scala.io.StdIn.readLine().toInt
7     if (choice == 1){
8       add()
9     }
10    else if(choice == 2){
11      even_odd()
12    }
13    else if(choice == 3){
14      println("Enter side of square: ")
15      var side = scala.io.StdIn.readLine().toInt
16      var area = area_of_square(side)
17      println("Area of Square of side ", side, " is ", area)
18    }else{
19      println("Please Enter Valid input.")
20    }
21  }
22
23
24
25  def add()={
26    println("Enter Number: 1 ")
27    var a = scala.io.StdIn.readLine().toInt
28    println("Enter Number 2: ")
29    var b = scala.io.StdIn.readLine().toInt
30    println("Addition is: ")
31    println(a+b)
32  }
33
34  def even_odd()={
35    println("Enter Number to check even odd: ")
36    var a = scala.io.StdIn.readLine().toInt
  
```

STDIN

```

1
2
3
  
```

Output:

```

Hello, world
What you want to do...
Enter 1 for addition
Enter 2 for even_odd
Enter 3 for area of square
Enter Number: 1
Enter Number 2:
Addition is:
5
  
```

warning: 1 deprecation; re-run with -deprecation for details

Fig. 1.1 Scala Addition Program

The screenshot shows the same web browser window with the URL <https://onecompiler.com/scala/3z8ntu97s>. The code editor displays the same Scala program as in Figure 1.1. The user has entered 2 and 6 in the STDIN input field. The output shows the program's response to these inputs: "Hello, world", "What you want to do...", "Enter 1 for addition", "Enter 2 for even\_odd", "Enter 3 for area of square", "Enter Number to check even odd:", and "(6, is Even Number)". A warning message at the bottom indicates a deprecation warning.

```

1 object Hello {
2   def main(args: Array[String]) = {
3     println("Hello, world")
4     println("What you want to do...")
5     println("Enter 1 for addition\nEnter 2 for even_odd\nEnter 3 for area of square")
6     var choice = scala.io.StdIn.readLine().toInt
7     if (choice == 1){
8       add()
9     }
10    else if(choice == 2){
11      even_odd()
12    }
13    else if(choice == 3){
14      println("Enter side of square: ")
15      var side = scala.io.StdIn.readLine().toInt
16      var area = area_of_square(side)
17      println("Area of Square of side ", side, " is ", area)
18    }else{
19      println("Please Enter Valid input.")
20    }
21  }
22
23
24
25  def add()={
26    println("Enter Number: 1 ")
27    var a = scala.io.StdIn.readLine().toInt
28    println("Enter Number 2: ")
29    var b = scala.io.StdIn.readLine().toInt
30    println("Addition is: ")
31    println(a+b)
32  }
33
34  def even_odd()={
35    println("Enter Number to check even odd: ")
36    var a = scala.io.StdIn.readLine().toInt
  
```

STDIN

```

2
6
  
```

Output:

```

Hello, world
What you want to do...
Enter 1 for addition
Enter 2 for even_odd
Enter 3 for area of square
Enter Number to check even odd:
(6, is Even Number)
  
```

warning: 1 deprecation; re-run with -deprecation for details

Fig. 1.2 Scala Even-Odd Program 1

## Lab Assignment (Data Science)

```
1 object HelloWorld {
2   def main(args: Array[String]) = {
3     println("Hello, world")
4     println("What you want to do...")
5     println("Enter 1 for addition\nEnter 2 for even_odd\nEnter 3 for area of sqauare")
6     var choice = scala.io.StdIn.readLine().toInt
7     if (choice == 1){
8       add()
9     }
10    else if(choice == 2){
11      even_odd()
12    }
13    else if(choice == 3){
14      println("Enter side of sqauare: ")
15      var side = scala.io.StdIn.readLine().toInt
16      var area = area_of_square(side)
17      println("Area of Square of side ", side, " is ", area)
18    }else{
19      println("Please Enter Valid input.")
20    }
21  }
22
23  def add()={
24    println("Enter Number: 1 ")
25    var a = scala.io.StdIn.readLine().toInt
26    println("Enter Number 2: ")
27    var b = scala.io.StdIn.readLine().toInt
28    println("Addition is: ")
29    println(a+b)
30  }
31
32  def even_odd()={
33    println("Enter Number to check even odd: ")
34    var a = scala.io.StdIn.readLine().toInt
35  }
36}
```

STDIN

2  
5

Output:

Hello, world  
What you want to do...  
Enter 1 for addition  
Enter 2 for even\_odd  
Enter 3 for area of sqauare  
Enter Number to check even odd:  
(5, is Odd Number)

warning: 1 deprecation; re-run with -deprecation for details

Fig. 1.3 Scala Even-Odd Program 2

```
1 object HelloWorld {
2   def main(args: Array[String]) = {
3     println("Hello, world")
4     println("What you want to do...")
5     println("Enter 1 for addition\nEnter 2 for even_odd\nEnter 3 for area of sqauare")
6     var choice = scala.io.StdIn.readLine().toInt
7     if (choice == 1){
8       add()
9     }
10    else if(choice == 2){
11      even_odd()
12    }
13    else if(choice == 3){
14      println("Enter side of sqauare: ")
15      var side = scala.io.StdIn.readLine().toInt
16      var area = area_of_square(side)
17      println("Area of Square of side ", side, " is ", area)
18    }else{
19      println("Please Enter Valid input.")
20    }
21  }
22
23  def add()={
24    println("Enter Number: 1 ")
25    var a = scala.io.StdIn.readLine().toInt
26    println("Enter Number 2: ")
27    var b = scala.io.StdIn.readLine().toInt
28    println("Addition is: ")
29    println(a+b)
30  }
31
32  def even_odd()={
33    println("Enter Number to check even odd: ")
34    var a = scala.io.StdIn.readLine().toInt
35  }
36}
```

STDIN

3  
5

Output:

Hello, world  
What you want to do...  
Enter 1 for addition  
Enter 2 for even\_odd  
Enter 3 for area of sqauare  
Enter side of sqauare:  
(Area of Square of side ,5, is ,25.0)

warning: 1 deprecation; re-run with -deprecation for details

Fig. 1.4 Area of Square