

Scala Tutorial 4

Question 01

```
object answer1{
  def main(args: Array[String]): Unit = {
    def interest(x:Double):Double= x match{
      case x if x<=20000 => x*0.02;
      case x if x<=200000 => x*0.04;
      case x if x<=2000000 => x*0.035;
      case x if x>2000000 => x*0.65;
    }
    println("Enter the Amount : ");
    var amount=scala.io.StdIn.readDouble();
    print("Interest : "+interest(amount));
  }
}
```

Question 02

```
object answer2{
  def main(args: Array[String]): Unit = {
    printf("Enter an Integer : ");
    var x=scala.io.StdIn.readInt();
    def patternMatch(x:Int):Unit= x match {
      case x if x>=0 => println("The number is Negative / Zero");
      case x if x%2==0 => println("Number is Even");
      case x if x%2!=0 => println("Number is Odd");
    }
    patternMatch(x);
  }
}
```

Question 03

```
object answer3{
  def main(args: Array[String]): Unit = {
    def toUpper(x: String): String = {
      x.toUpperCase()
    }
    def toLower(x: String): String = {
      x.toLowerCase()
    }
    def formatNames(name: String, index: Array[Int], func:
(String) => String): String = {
      if(index.isEmpty){
        func(name)
      }else{
        var str = ""
        for( i <- 0 to name.length()-1){
          if(index.contains(i))
str=str+func(name.charAt(i).toString())
          else str=str+name.charAt(i).toString()
        }
        str
      }
    }

    println(formatNames("Benny",Array(),toUpper(_)))
    println(formatNames("Niroshan",Array(0,1),toUpper(_)))
    println(formatNames("Saman",Array(),toLower(_)))
    println(formatNames("Kumara",Array(5),toUpper(_)))
  }
}
```