

University of Colombo School of Computing

SCS 2204

Functional Programming

Tutorial 4

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Question 01

```
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*0.065
}
print("Enter the number of amount : ")
var amount = scala.io.StdIn.readDouble()
print("Interest : "+interest(amount))
```

Question 02

```
print("Enter a number : ")
var input = scala.io.StdIn.readInt()
def PatternMatching(x:Int):Any = x match{
  case x if x<=0 => println("The number is Negative/Zero")
  case x if x%2==0 => println("The number is even")
  case x => println("The number is odd")
}
PatternMatching(input)
```

Question 03

```
def toUpper(x: String): String = {
  x.toUpperCase()
}
def toLower(x: String): String = {
  x.toLowerCase()
}

def formatNames(name: String, func: (String) => String): String = {
  func(name)
}

println(formatNames("Benny",toUpper(_)))
print(formatNames("N",toUpper(_))+formatNames("iroshan",toLower(_)))
println("")
```

```
println(formatNames("Saman",toLower(_)))  
println(formatNames("K",toUpper(_))+formatNames("umar",toLower(_))+formatNames("a",toUpper(_)))
```