22001212 - Practical 09

01)

22001212_q1.scala

```scala
object interestCalculate{

    val InterestCalculate:Double=>Double=deposit=>deposit match {
        case d if(d<=20000)=>d*2/100;
        case d if(d<=200000)=>d*4/100;
        case d if(d<=2000000)=>d*3.5/100;
        case d if(d>2000000)=>d*6.5/100;
    }

    def main(args:Array[String]):Unit={
        printf("\nEnter the deposit amount = ");
        val amount=scala.io.StdIn.readDouble();
        val interest=InterestCalculate(amount);
        println(f"\nInterest for $amount is $interest");
    }
}
```

```
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09> scala 22001

Enter the deposit amount = 25000

Interest for 25000.0 is 1000.0
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09>
```

02)

22001212_q2.scala

22001212_q2.scala > {} patternMatcher

```scala
object patternMatcher{

    val numberMatcher:Int=>String=number=>number match{
        case n if(n<=0)=>"Negative/Zero is input";
        case n if(n%2==0)=>"Even number is given";
        case _ =>"Odd number is given";
    }

    def main(args:Array[String]):Unit={
        if(args.length>0){
            val num=args(0).toInt;
            println(numberMatcher(num));
        }
        else{
            println("\nPlease provide an integer input as an argument.");
        }
    }
}
```

```
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09> scala 22001212_q2.scala 95
Odd number is given
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09> scala 22001212_q2.scala 86
Even number is given
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09> scala 22001212_q2.scala -5
Negative/Zero is input
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09> scala 22001212_q2.scala

Please provide an integer input as an argument.
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09>
```

03)

22001212_q3.scala > ...

```scala
object Formatter{
  val toUpper:String =>String = _.toUpperCase;

  val toLower:String =>String = _.toLowerCase;

  def formatNames(name:String)(formatFunction:String =>String):String = {
    formatFunction(name);
  }

  def main(args: Array[String]): Unit = {
    println(formatNames("Benny")(toUpper));
    println(formatNames("Niroshan")(name => {
      val (first, rest) = name.splitAt(2);
      first.toUpperCase+rest.toLowerCase;
    }));
    println(formatNames("Saman")(toLower));
    println(formatNames("Kumara")(name => {
      val (first, rest) = name.splitAt(name.length - 1);
      first+rest.toUpperCase;
    }));
  }
}

```

```
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09> scala 22001212_q3.scala
BENNY
NIroshan
saman
KumarA
PS C:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Programming\Practical 09>
```