Practical 03 – 22001212

01)

```scala
22001212_q1.scala > {} demo
1    def reverseString(string:String):String={
2        if(string.isEmpty()){
3            return " ";
4        }
5        else{
6            reverseString(string.tail)+string.head;
7        }
8    }
9
10   object demo{
11       def main(args:Array[String]):Unit={
12           print(reverseString("Welcome"));
13       }
14   }
```

```
[Running] scala "c:\Users\User\Desktop\UCSC\2nd Year Sem
emocleW
[Done] exited with code=0 in 7.166 seconds
```

02)

```scala
22001212_q2.scala > {} Demo2
1  def filterList(stringList:List[String]):List[String]={
2      var afterList=List[String]();
3      for(str<-stringList){
4          if(str.length()>5){
5              afterList=afterList:+str;
6          }
7      }
8      return afterList;
9  }
10
11  object Demo2{
12      def main(args:Array[String]):Unit={
13          val list1= List ("Football","Cricket","Elle","Golf","Netball");
14          println("The initial list : "+list1);
15          println("The strings that have a length greater than 5 : "+ filterList(list1));
16      }
17  }
```

```
[Running] scala "c:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204 - Functional Prog
The initial list : List(Football, Cricket, Elle, Golf, Netball)
The strings that have a length greater than 5 : List(Football, Cricket, Netball)

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```

03)

```scala
22001212_q3.scala > {} Demo2
1  def arithmeticMean(num1:Int,num2:Int):Float={
2      val average = (num1 + num2) / 2;
3      f"$average%.2f".toFloat;
4  }
5
6  object Demo2{
7      def main(args:Array[String]):Unit={
8          var n1=15;
9          var n2=17;
10          print("Arithmetic Mean of "+n1+ " and "+n2+ " = "+arithmeticMean(n1,n2));
11      }
12  }
```

```
[Running] scala "c:\Users\User\Desktop\UCSC\2nd Year
Arithmetic Mean of 15 and 17 = 16.0
[Done] exited with code=0 in 8.12 seconds
```

04)

```scala
22001212_q4.scala > sumOfEven
1    def sumOfEven(numbers:List[Int]):Int={
2        var sum=0;
3        for(i<-numbers){
4            if(i%2==0){
5                sum=sum+i;
6            }
7        }
8        return sum;
9    }
10
11   object Demo3{
12       def main(args:Array[String]):Unit={
13           val list2=List(15,22,27,30,48,71);
14           println("Numbers in the list = "+list2);
15           println("The sum of all the even numbers in the list = "+sumOfEven(list2));
16       }
17   }
```

```
[Running] scala "c:\Users\User\Desktop\UCSC\2nd Year Sem-01\SCS 2204
Numbers in the list = List(15, 22, 27, 30, 48, 71)
The sum of all the even numbers in the list = 100

[Done] exited with code=0 in 7.156 seconds
```