File Exception Handling

Demonstration of FileInputStream and FileOutputStream operations in File

create a java file 'numbers.txt' and write set of even or odd numbers into the file.

Read the contents of 'numbers.txt' ,and write the even numbers to 'even.txt' and odd numbers to 'odd.txt'.

Display the contents of numbers.txt,even.txt and odd.txt.

Handle File related Exceptions also.

Expected Output

```
number.txt created

even.txt created

odd.txt created

Enter the number of elements you want to store: 5
Enter the elements:
11 12 13 14 15
Data added

Content of number.txt is:
11
12
13
14
15
Even and odd numbers have been separated into even.txt and odd.txt

Content of even.txt:
12
14
Content of odd.txt:
11
13
15
```

Experiment 14

Multithreading

Implementation of Multithreading

Write a Java program that implements a multi-threaded program which has three threads. First thread generates a random integer every 1 second. If the value is even, second thread computes the square of the number and prints. If the value is odd the third thread will print the value of cube of the number

Expected Output

```
cube of 45 = 91125
cube of 15 = 3375
cube of 11 = 1331
cube of 29 = 24389
cube of 23 = 12167
Square of 22 =484
Square of 42 =1764
Square of 44 =1936
Square of 34 =1156
cube of 39 = 59319
Square of 48 =2304
```

Thread Synchronization

Demonstration of Thread Synchronization

Write a multithreaded Java program to create the Addition Table for any three given number(limit-10) ,and implement thread synchronization While generating the table.

Expected Output

```
Enter the Table you want to run by thread1
5
Enter the Table you want to run by thread2
10
Enter the Table you want to run by thread3
15
5+1=6
5+2=7
5+3=8
5+4=9
5+5=10
15+1=16
15+2=17
15+3=18
15+4=19
15+5=20
10+1=11
10+2=12
10+3=13
10+4=14
10+5=15
```