

//This class uses five threads representing five partitions of a file and merges them to recreate the original file.

```
import java.io.*;
import java.util.ArrayList;

public class Merger implements Runnable //Merger class implements the Runnable
interface
{
    public void run() //run method from the runnable interface
    {
        ArrayList<String> list = new ArrayList<String>();
        try
        {
            BufferedReader br1 = new BufferedReader(new
            FileReader("file1.txt"));
            BufferedReader br2 = new BufferedReader(new
            FileReader("file2.txt"));
            BufferedReader br3 = new BufferedReader(new
            FileReader("file3.txt"));
            BufferedReader br4 = new BufferedReader(new
            FileReader("file4.txt"));
            BufferedReader br5 = new BufferedReader(new
            FileReader("file5.txt"));

            String s1,s2,s3,s4,s5 =null;

            //reading from the partitions and writing in the original file
            while ((s1 = br1.readLine()) != null)
            {
                list.add(s1);
            }
            while((s2 = br2.readLine()) != null)
            {
                list.add(s2);
            }

            while((s3 = br3.readLine()) != null)
            {
                list.add(s3);
            }

            while((s4 = br4.readLine()) != null)
            {
                list.add(s4);
            }

            while((s5 = br5.readLine()) != null)
            {
                list.add(s5);
            }













            BufferedWriter writer=null;
            writer = new BufferedWriter(new FileWriter("original.txt"));
            String listWord;
```

```

        for (int i = 0; i < list.size(); i++)
        {
            listWord = list.get(i);
            writer.write(listWord);
            writer.write("\n");
        }
        System.out.println();
        System.out.println("Merging Done.");
        writer.close();
    }
    catch (IOException e)
    {
        e.printStackTrace();
    }
}

public static void main(String[] args) throws IOException
{
    Merger merge = new Merger();
}
}

```

 File1	10/30/2017 5:50 PM	Text Document	102,400 KB
 File2	10/30/2017 5:50 PM	Text Document	102,400 KB
 File3	10/30/2017 5:50 PM	Text Document	102,400 KB
 File4	10/30/2017 5:50 PM	Text Document	102,400 KB
 File5	10/30/2017 5:50 PM	Text Document	102,400 KB
 newfile	10/31/2017 11:52 ...	Text Document	512,000 KB
 File1	10/31/2017 11:58 ...	Text Document	419,431 KB
 File2	10/31/2017 11:58 ...	Text Document	419,431 KB
 File3	10/31/2017 11:58 ...	Text Document	419,431 KB
 File4	10/31/2017 11:59 ...	Text Document	419,431 KB
 File5	10/31/2017 11:59 ...	Text Document	419,431 KB
 newfile	11/1/2017 12:04 AM	Text Document	2,097,152 KB