https://github.com/PatelVraj10/java\_practical\_file\_5

**1.**

**/\*By 21CE105 Vraj Patel**

**Question : WAP to show how to create a file with different mode and methods of File class to find**

**path, directory etc.**

**GITHUB LINK : https://github.com/PatelVraj10/java\_practical\_file\_5 \*/**

**import java.util.\*;**

**import java.io.\*;**

**class P5P1**

**{**

**public static void main(String... args)**

**{**

**//Creating the file**

**try**

**{**

**File myObj=new File("Part5Practical1.txt");**

**if(myObj.createNewFile())**

**{**

**System.out.println("File created with name "+myObj.getName());**

**}**

**else**

**{**

**System.out.println("File already exists");**

**}**

**}**

**catch(Exception e)**

**{**

**System.out.println(e.getMessage());**

**}**

**//Opening in writing mode**

**try**

**{**

**FileWriter myObj=new FileWriter("Part5Practical1.txt");**

**myObj.write("This is Part 5 Practical 5\nCreated by 21CE105 Vraj Patel");**

**myObj.close();**

**}**

**catch(Exception e)**

**{**

**System.out.println(e.getMessage());**

**}**

**//Reading from the file**

**try**

**{**

**File myObj=new File("Part5Practical1.txt");**

**Scanner myReader = new Scanner(myObj);**

**while(myReader.hasNextLine())**

**{**

**String data=myReader.nextLine();**

**System.out.println(data);**

**}**

**}**

**catch(Exception e)**

**{**

**System.out.println(e.getMessage());**

**}**

**//Getting path of File and directory**

**try**

**{**

**File myObj=new File("Part5Practical1.txt");**

**String path = myObj.getAbsolutePath();**

**String directory=new File(path).getParent();**

**System.out.println("Path of file : "+path);**

**System.out.println("Directory : "+directory);**

**}**

**catch(Exception e)**

**{**

**System.out.println(e.getMessage());**

**}**

**}**

**}**

**2.**

**/\*By 21CE105 Vraj Patel**

**Question : When to use Character Stream over Byte Stream? When to use Byte Stream over Character**

**Stream? Give example.**

**Ans:Byte streams are used to perform input and output of 8-bit bytes.**

**Byte streams are useful when we want to read/write binary data.**

**Character stream is used to perform input and output operations of 16-bit Unicode.**

**Character streams are used to read/write characters.**

**GITHUB LINK : https://github.com/PatelVraj10/java\_practical\_file\_5 \*/**

**import java.io.\*;**

**// Main class**

**public class P5P2**

**{**

**// Main driver method**

**public static void main(String[] args)**

**throws IOException**

**{**

**// Initially assigning null as we have not read**

**// anything**

**FileReader sourceStream = null;**

**// Try block to check for exceptions**

**try {**

**// Reading from file**

**sourceStream = new FileReader(**

**"Part5Practical2.txt");**

**// Reading sourcefile and writing content to**

**// target file character by character.**

**int temp;**

**// If there is content inside file**

**// than read**

**while ((temp = sourceStream.read()) != -1)**

**System.out.println((char)temp);**

**// Display message for successful execution of program**

**System.out.print("Program successfully executed");**

**}**

**// finally block that executes for sure**

**// where we are closing file connections**

**// to avoid memory leakage**

**finally {**

**// Closing stream as no longer in use**

**if (sourceStream != null)**

**sourceStream.close();**

**}**

**}**

**}**

**3.**

**/\*By 21CE105 Vraj Patel**

**Question : Write a program to transfer data from one file to another file so that if the destination**

**file does not exist, it is created**

**GITHUB LINK : https://github.com/PatelVraj10/java\_practical\_file\_5 \*/**

**import java.io.\*;**

**import java.util.\*;**

**class P5P3**

**{**

**public static void copyContent(File a, File b)**

**throws Exception**

**{**

**FileInputStream in = new FileInputStream(a);**

**FileOutputStream out = new FileOutputStream(b);**

**try {**

**int n;**

**// read() function to read the**

**// byte of data**

**while ((n = in.read()) != -1) {**

**// write() function to write**

**// the byte of data**

**out.write(n);**

**}**

**}**

**finally {**

**if (in != null) {**

**// close() function to close the**

**// stream**

**in.close();**

**}**

**// close() function to close**

**// the stream**

**if (out != null) {**

**out.close();**

**}**

**}**

**System.out.println("File Copied");**

**}**

**public static void main(String[] args) throws Exception**

**{**

**Scanner sc = new Scanner(System.in);**

**// get the source file name**

**System.out.println(**

**"Enter the source filename from where you have to read/copy :");**

**String a = sc.nextLine();**

**// source file**

**File x = new File(a);**

**// get the destination file name**

**System.out.println(**

**"Enter the destination filename where you have to write/paste :");**

**String b = sc.nextLine();**

**// destination file**

**File y = new File(b);**

**// method called to copy the**

**// contents from x to y**

**copyContent(x, y);**

**}**

**}**

**4.**

**/\*By 21CE105 Vraj Patel**

**Question : WAP to show use of character and byte stream.**

**GITHUB LINK :** **https://github.com/PatelVraj10/java\_practical\_file\_5 \*/**

**import java.io.\*;**

**class P5P4**

**{**

**public static void main(String args[]) throws IOException**

**{**

**FileInputStream in = null;**

**FileOutputStream out = null;**

**try**

**{**

**in = new FileInputStream("Part5Practical4Input.txt");**

**out = new FileOutputStream("Part5Practical4Output.txt");**

**int c;**

**while ((c = in.read()) != -1)**

**{**

**out.write(c);**

**}**

**}**

**finally**

**{**

**if (in != null)**

**{**

**in.close();**

**}**

**if (out != null)**

**{**

**out.close();**

**}**

**}**

**}**

**}**

**5.**

**/\*By 21CE105 Vraj Patel**

**Question : Write a program to enter any 15 numbers from the user and store only even numbers in a file**

**named “Even.txt”. And display the contents of this file on the console.**

**GITHUB LINK : https://github.com/PatelVraj10/java\_practical\_file\_5 \*/**

**import java.io.\*;**

**import java.util.\*;**

**class P5P5**

**{**

**public static void main(String... args) throws Exception**

**{**

**Scanner sc=new Scanner(System.in);**

**int[] arr=new int[15];**

**for(int i=0;i<15;i++)**

**{**

**System.out.println("Enter the "+(i+1)+" number : ");**

**arr[i]=sc.nextInt();**

**}**

**//Buffered Writer**

**FileWriter writer=new FileWriter("Part5Practical5Even.txt");**

**BufferedWriter buffer= new BufferedWriter(writer);**

**for(int i=0;i<15;i++)**

**{**

**if(arr[i]%2==0)**

**{**

**buffer.write(arr[i]+" ");**

**}**

**}**

**buffer.close();**

**//Buffered Reader**

**FileReader fr=new FileReader("Part5Practical5Even.txt");**

**BufferedReader br=new BufferedReader(fr);**

**int i;**

**System.out.println("Reading the file : ");**

**while((i=br.read())!=-1)**

**{**

**System.out.print((char)i);**

**}**

**br.close();**

**fr.close();**

**}**

**}**

**6.**

**/\*By 21CE105 Vraj Patel**

**Question : WAP to demonstrate methods of wrapper class**

**GITHUB LINK : https://github.com/PatelVraj10/java\_practical\_file\_5 \*/**

**class P5P6**

**{**

**public static void main(String args[])**

**{**

**byte b=10;**

**short s=20;**

**int i=30;**

**long l=40;**

**float f=50.0F;**

**double d=60.0D;**

**char c='a';**

**boolean b2=true;**

**//Autoboxing: Converting primitives into objects**

**Byte byteobj=b;**

**Short shortobj=s;**

**Integer intobj=i;**

**Long longobj=l;**

**Float floatobj=f;**

**Double doubleobj=d;**

**Character charobj=c;**

**Boolean boolobj=b2;**

**//Printing objects**

**System.out.println("---Printing object values---");**

**System.out.println("Byte object: "+byteobj);**

**System.out.println("Short object: "+shortobj);**

**System.out.println("Integer object: "+intobj);**

**System.out.println("Long object: "+longobj);**

**System.out.println("Float object: "+floatobj);**

**System.out.println("Double object: "+doubleobj);**

**System.out.println("Character object: "+charobj);**

**System.out.println("Boolean object: "+boolobj);**

**//Unboxing: Converting Objects to Primitives**

**byte bytevalue=byteobj;**

**short shortvalue=shortobj;**

**int intvalue=intobj;**

**long longvalue=longobj;**

**float floatvalue=floatobj;**

**double doublevalue=doubleobj;**

**char charvalue=charobj;**

**boolean boolvalue=boolobj;**

**//Printing primitives**

**System.out.println("---Printing primitive values---");**

**System.out.println("byte value: "+bytevalue);**

**System.out.println("short value: "+shortvalue);**

**System.out.println("int value: "+intvalue);**

**System.out.println("long value: "+longvalue);**

**System.out.println("float value: "+floatvalue);**

**System.out.println("double value: "+doublevalue);**

**System.out.println("char value: "+charvalue);**

**System.out.println("boolean value: "+boolvalue);**

**}**

**}**