

**CHAROTAR UNIVERSITY OF SCIENCE & TECHNOLOGY****Chandubhai S Patel Institute of Technology****U & P U. Patel Department of Computer Engineering****Subject Name: JAVA****Subject Code: CE251****Semester: 3rd****Academic Year: 2022-23****Assignment 5****GitHub repository link :**

<b>1.</b>	<b>WAP to show how to create a file with different mode and methods of File class to find path, directory etc.</b>
<b>Code:</b>	<pre>// Name :-Aswani darsh // Roll-no :-21ce006 import java.io.File; public class prec5_1 {     public static void main(String[] args) {         File f = new File("1.txt");         System.out.println("File name : "+f.getName());         System.out.println("Path : "+f.getPath());         System.out.println("Absolute path : "+f.getAbsolutePath());         System.out.println("Parent : "+f.getParent());         System.out.println("Existence of file : "+f.exists());         if(f.exists())         {             System.out.println("can we write? : "+f.canWrite());             System.out.println("readable? : "+f.canRead());             System.out.println("Is a directory :  "+f.isDirectory());             System.out.println("File Size(bytes) : "+f.length());             System.out.println("This program is created by Darsh Aswani 21ce006");         }     } }</pre>

<b>Output:</b>	<pre> File name : 1.txt Path : 1.txt Absolute path : E:\Darsh\java\Practicle_file\DarshAssignment5\1.txt Parent : null Existence of file : true can we write? : true readable? : true Is a directory : false File Size(bytes) : 38 This program is created by Darsh Aswani 21ce006 </pre>
<b>2.</b>	<p><b>When to use Character Stream over Byte Stream? When to use Byte Stream over Character Stream? Give example.</b></p>
<b>Code:</b>	<p><b>1.</b></p> <pre> // Name :-darsh aswani // Roll-no :-21ce006 import java.io.*; public class prec5_2_1 {     public static void main(String[] args) throws IOException {         FileReader source = null;         try {             source = new FileReader("1.txt");             int temp;             while ((temp = source.read()) != -1)                 System.out.print((char) temp);             System.out.println("\nThis program is created by Darsh Aswani 21ce006");         }         finally {             if (source != null)                 source.close();         }     } } </pre> <p><b>2.</b></p> <pre> // Name :-Darsh aswani // Roll-no :-21ce006 import java.io.*; public class prec5_2_2 {     public static void main(String[] args) throws IOException     {         FileInputStream sourceStream = null;         FileOutputStream targetStream = null; </pre>

```
try
{
    sourceStream = new FileInputStream("1.txt");
    targetStream = new FileOutputStream("2.txt");
    int temp;
    while ((temp = sourceStream.read()) != -1)
        targetStream.write((byte)temp);
    System.out.println("\nThis program is created by Darsh
Aswani 21ce006");

}
finally
{
    if (sourceStream != null)
        sourceStream.close();
    if (targetStream != null)
        targetStream.close();
}
}
```

**Output:**

1.

```
Darsh Aswani Here Nice To meet you!...
This program is created by Darsh Aswani 21ce0
06
PS E:\Darsh\java\Practicle_file\DarshAssignme
```

```
acticle_file > DarshAssignment5 > ≡ 1.txt
```

```
1 Darsh Aswani Here Nice To meet you!...
```

2.

```
acticle_file > DarshAssignment5 > ≡ 1.txt
```

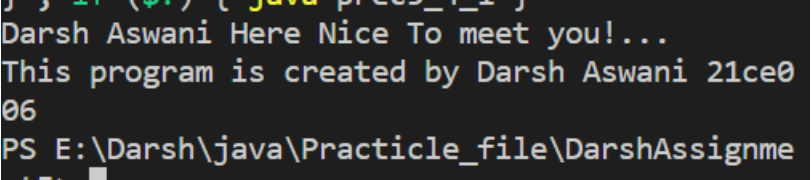
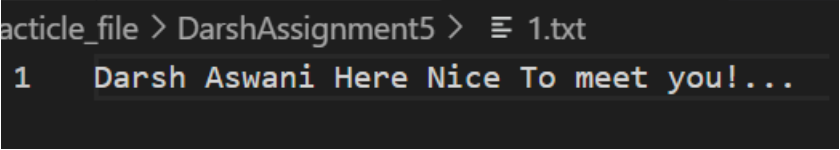
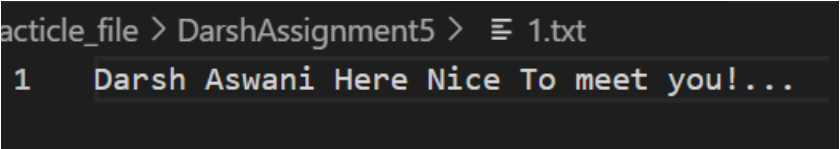
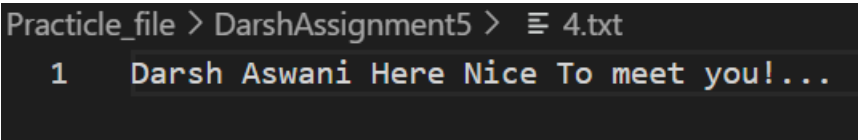
```
1 Darsh Aswani Here Nice To meet you!...
```

```
Practicle_file > DarshAssignment5 > ≡ 2.txt
```

```
1 Darsh Aswani Here Nice To meet you!...
```

	Copy File 1's content in File 2.
3.	Write a program to transfer data from one file to another file so that if the destination file does not exist, it is created.
Code:	<pre>// Name :-Aswani Darsh // Roll-no :-21ce006 import java.io.*; public class prec5_3 {     public static void main(String[] args) throws IOException {         FileInputStream in = null;         FileOutputStream out = null;         try {             in = new FileInputStream("1.txt");             out = new FileOutputStream("3.txt");             int c;             while ((c = in.read()) != -1) {                 out.write(c);             }             System.out.println("\nThis program is created by Darsh Aswani 21ce006");          }         catch(IOException ie) {         }         finally {             if (in != null) {                 in.close();             }             if (out != null) {                 out.close();             }         }     } }</pre>
Output:	 <p>The screenshot shows the output of the Java program, which is "This program is created by Darsh Aswani 21ce006". Below the output, a file explorer view shows the file "3.txt" in the directory "Practicle_file &gt; DarshAssignment5". The content of "3.txt" is "1 Darsh Aswani Here Nice To meet you!...".</p>

	<pre>acticle_file &gt; DarshAssignment5 &gt; ≡ 1.txt 1   Darsh Aswani Here Nice To meet you!...</pre>
4.	<b>WAP to show use of character and byte stream.</b>
Code:	<p>1.</p> <pre>// Name :-Aswani DARsh // Roll-no :-21ce006 import java.io.*; public class prec5_4_1 {     public static void main(String[] args) {         FileReader reader = null;         try {             reader = new FileReader("1.txt");             int fChar;             while ((fChar = reader.read()) != -1) //read char by char                 System.out.print((char)fChar); //write char char                 System.out.println("\nThis program is created by Darsh Aswani 21ce006");         }         catch(Exception e){             System.out.println(e);         }     } }</pre> <p>2.</p> <pre>// Name :-Aswani darsh // Roll-no :-21ce006 import java.io.*; public class prec5_4_2 {     public static void main(String[] args) {         FileInputStream fis = null;         FileOutputStream fos = null;         try {             fis = new                 FileInputStream("1.txt");             fos = new FileOutputStream                 ("4.txt");             int temp;             while ((temp = fis.read()) != -1) //read byte by byte</pre>

	<pre>         fos.write((byte)temp); //write byte by byte     if (fis != null)         fis.close();     if (fos != null)         fos.close();     System.out.println("\nThis program is created by Darsh Aswani 21ce006");     }     catch(Exception e){         System.out.println(e);     } } } </pre>
<b>Output:</b>	<p>1.</p>   <p>2.</p>  <p>2.</p> 
<b>5.</b>	<p><b>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. (BufferedReader / BufferedWriter).</b></p>
<b>Code:</b>	<pre> // Name :-Aswani Darsh // Roll-no :-21ce006 </pre>

```
import java.util.*;
import java.io.*;
public class prec5_5 {
    public static void main(String[] args) throws IOException
    {
        BufferedReader br = null;
        BufferedWriter bw = null;
        FileReader in = null;
        FileWriter out = null;
        String filelocation = "Even.txt";
        File file = new File(filelocation);
        try
        {
            out= new FileWriter("Even.txt");
            bw= new BufferedWriter(out);
            ArrayList<Integer> num = new ArrayList<Integer>(15);
            System.out.println("Enter 15 Numbers : ");
            for(int i=0;i<15;i++)
            {
                Scanner sc= new Scanner(System.in);
                num.add(sc.nextInt());
            }
            for(int i=0;i<15;i++)
            {
                if(((num.get(i))%2==0))
                {
                    bw.write(num.get(i));
                }
            }
            bw.close();
            int abc;
            in= new FileReader("Even.txt");
            br= new BufferedReader(in);
            System.out.println("");
            System.out.println("Now Printing Even Numbers
fromEven.txt ...");
            while ((abc=br.read())!=-1)
            {
                System.out.println((abc));
            }
            System.out.println("\nThis program is created by Darsh
Aswani 21ce006");
        }
        catch(Exception e)
        {
            System.out.println(" Some exception are founf ! Please
entered valid integer!!! ");
        }
    }
}
```

	<pre>        finally         {             if (br != null)             {                 br.close();             }         }     }</pre>
<b>Output:</b>	<pre>Enter 15 Numbers : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15  19 20 21 22  Now Printing Even Numbers fromEven.txt ... 2 4 6 8 10 18 20 22  This program is created by Darsh Aswani 21ce006</pre>



6.	<b>WAP to demonstrate methods of wrapper class.</b>
<b>Code:</b>	<pre>// Name :-Aswani Darsh // Roll-no :-21ce006  public class Prec5_6 {     public static void main(String[] args) {         System.out.println("Method 1 :-");         int a = 129;         Integer i = Integer.valueOf(a);         Integer j = a;         System.out.println(a + " " + j + " " + i);         System.out.println("\nMethod 2 :-");         Integer x = Integer.valueOf(150);         Integer y = x;         Integer z = x;         System.out.println(x + " " + y + " " + z);         System.out.println("\nThis program is created by Darsh Aswani 21ce006");      } }</pre>
<b>Output:</b>	<pre>Method 1 :- 129 129 129  Method 2 :- 150 150 150  This program is created by Darsh Aswani 21ce006</pre>