File Handling CRUD Operations

```
package crudOperations;
import java.io.FileInputStream;
import java.io.FileOutputStream;
import java.io.FileWriter;
import java.io.IOException;
import java.util.Scanner;

//created class takinginputs to take all the location of file and data for the file from the user
class takinginputs
{
	Scanner sc = new Scanner(System.in);
	//FilLocation return type, method to ask user for location of file for creating
	//new file or if user want to append data to file
	public String filLocation()
	{
		System.out.println("enter  complete path of text file. ");
		System.out.println("Eg:  - D:\\NewFileName.txt");
		String loc = sc.nextLine();
		return loc;
	}
	//userData return type method, to get the data from the user to append to the file
	public String userData()
	{
		System.out.println("Write  Something.");
		String str = sc.nextLine();
		return str;
	}
}

//CreateFile Class to create new text file
class CreateFile
{
```

```
	//create method with exception handling
	public void create()  throws IOException
	{
		//creating object for takinginputs class
		takinginputs obj = new takinginputs();
		//calling filLoaction method to get the location
		FileOutputStream  out= new FileOutputStream(obj.filLocation());
		//calling userData method to get data of the user.
		String input = obj.userData();
		byte array[]=  input.getBytes();
		//writing data to txt file
		out.write(array);
		System.out.println("Data  Written Successfully");
		out.close();
	}

}

//class readfile if user want to read file this function will be called
class ReadFile
{
	//created object for taking inputs
	takinginputs obj = new takinginputs();
	public void read() throws IOException
	{
		//getting location of file user want to read
		FileInputStream  stream= new FileInputStream(obj.filLocation());
		int data;
		//reading the whole text file and output the text.
		while((data=stream.read())!=-1)
		{

			System.out.print((char)data);
		}
```

```
                System.out.println("\n---  End of file ---");
        }
}

//class AppendFile if user want to add new data to the file.
class AppendFile
{
        //creating object for the calss takinginputs
        takinginputs obj = new takinginputs();
        public void appendText() throws IOException
        {
                //getting location where the file is present
                String path = obj.filLocation();
                FileWriter fw = new FileWriter(path,  true);
                fw.write(" "+obj.userData());
                fw.close();
                System.out.println("\nText  Successfull Added.");
        }
}

public class FileHandle {
        public static void main(String[] args)
        {

                Scanner sc = new Scanner(System.in);
                System.out.println("select  an option. \n 1.Create & Write \n 2.Read \n 3.Append");

                //getting input from user
                int option = sc.nextInt();

                //switching to specified case
                switch(option)
                {
                case 1:
```

```
{
        //creating object for class createFile
        CreateFile obj = new CreateFile();
        //using Exception handling to deal with exceptions
        try
        {
                //calling create method
                obj.create();
        }
        catch (IOException e)
        {
                // TODO Auto-generated  catch block
                System.out.println("Wrong  directory, change location. \n");
                e.printStackTrace();
        }
        break;
}
case 2:
{
        //creating object for class ReadFile
        ReadFile obj = new ReadFile();
        //using Exception handling to deal with exceptions
        try
        {
                //calling read method
                obj.read();
        }
        catch (IOException e)
        {
                // TODO Auto-generated  catch block
                System.out.println("file  not found");
                //e.printStackTrace();
        }
        break;
```

```
            }
            case 3:
            {
                //creating object for class AppendFile
                AppendFile obj = new AppendFile();
                //using Exception handling to deal with exceptions
                try
                {
                    //calling append method
                    obj.appendText();
                }
                catch (IOException e)
                {
                    // TODO Auto-generated catch block
                    System.out.println("file not found");
                    //e.printStackTrace();
                }
                break;
            }

            }
        }
}
```