

# User Documentation and External Files

1. Open the **NetBeans IDE** and begin a new **Java Application** called **YourLastNameU4A4Prog1**.
2. Add the following code to line 10 of your program in order to import the input and output components that will be necessary:

```
7
8
9 import java.util. Scanner;
10 import java.io.*; ←
11
```

3. Copy and paste the following code into the main program area:

```
Scanner keyedInput = new Scanner(System.in);

int choice;
String appName []= new String [4];
int appExp [] = new int [4];

System.out.println ("*****");
System.out.println ("*** EXPERIENCE VERIFIER PROGRAM ***");
System.out.println ("*****");
System.out.println ("");

System.out.println ("Select your option:");
System.out.println ("1... Analyse file applicant file and output");
System.out.println ("2... View Program help and documentation");
System.out.print ("Your Choice: ");

choice = keyedInput.nextInt();

if (choice == 1 )
{
try
{
FileReader file = new FileReader("applicantData.txt");
BufferedReader buffer = new BufferedReader(file);

for (int i=0;i<=3; i++)
{
appName[i]= buffer.readLine();
appExp[i] = Integer.parseInt(buffer.readLine());
}
buffer.close();
}
catch(IOException e)
{
System.out.println ("Sorry, the file was not found.");
}

try
{
FileWriter file = new FileWriter("applicantWith5Years.txt");
BufferedWriter buffer = new BufferedWriter (file);

for (int i=0; i<=3;i++)
{
```

```

        if (appExp[i] >=5)
        {
            buffer.write(appName[i]);
            buffer.newLine();
        }
    }
    buffer.close();
}
catch(IOException e)
{}
System.out.println ("The data has been outputted to applicantWith5Years.txt");

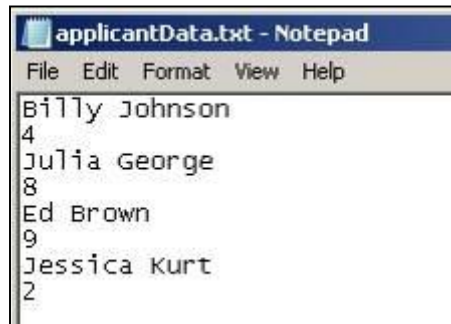
}
else if (choice ==2)
{
System.out.println ("The student's program and help information should appear here.");
}

else
{
System.out.println ("Sorry, you have enterdinvalid input");
}
}

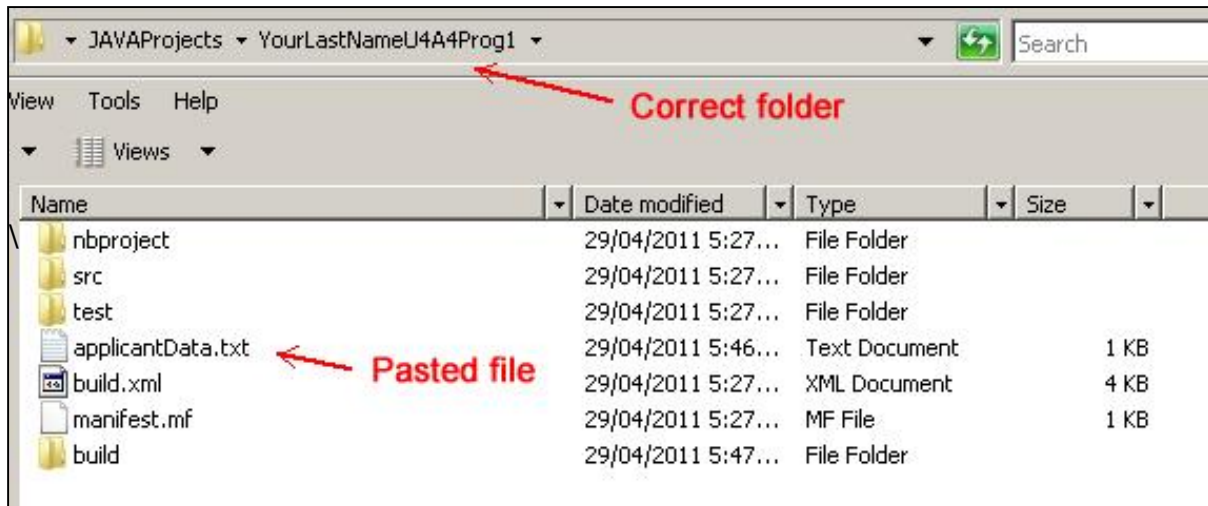
```

4. The code above creates a program that reads from an input file and then writes to an output file. The first problem is that the input file has not been created.

5. In order to create the file, open notepad or another simple word processing program and add the following data:



Save the file as applicantData.txt and then copy and paste it into the main folder for your project (you will need to find the main project folder entitled YourLastNameU4A4Prog1).

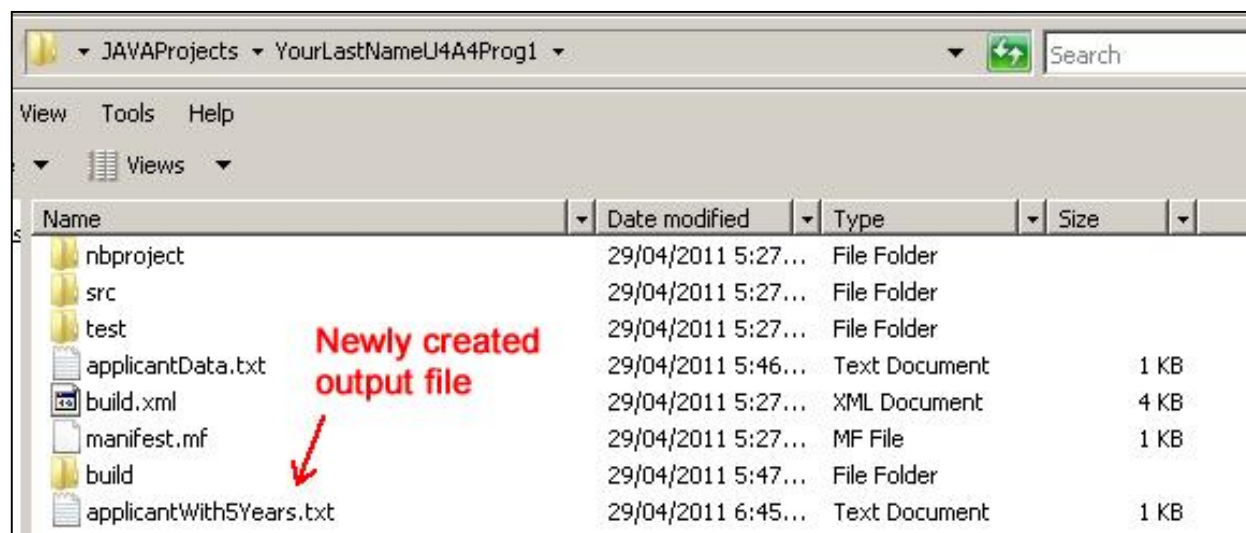


5. When you run the program, it will prompt the user to either analyse the data file and create output, or to view the program help and documentation.

If the user selects **option 1**, then the program will read from the data file and names of the programmers, as well as the integer value associated with their name. This integer value is the number of years experience the programmer has had with the Java language. The program will then write to an output file called applicantwith5years.txt the names of the programmers with five or more years of experience.

If the user selects option 2, then the program will output help information as well as program documentation related to the program.

After you have run the program, you can see the newly created data file in the main program folder:



You can view the file data by opening it in notepad or some other simple word processing software application:



- The code to complete step 1 has already been completed, your task is to develop a good understanding of the program so that you can complete the task required for option 2. You need to provide information to the program user about what the program does, where it obtains its data, and where it sends its data. You also need to provide information about when the program was created and by whom (you!).

You should include all of this information in the area dedicated to choice 2, which

```
73
74     else if (choice ==2)
75     {
76         System.out.println ("The student's program and help information should appear here.");
77     }
78
```

appears around lines 74-77.

A sample of the output generated by the program when the user selects option 2 is as follows (note that you are the one who needs to provide the details of the program):

