

JAVA Assignment Week 5

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1

```
//Program for FileOutputStream in Java
import java.io.FileOutputStream;
import java.io.OutputStream;
public class FOP {
public static void main(String[] args) {
String data="This text will be inside the file";
try{
OutputStream o=new FileOutputStream("file.txt");
byte[] a=data.getBytes();
o.write(a);
o.close();
}
catch(Exception e){
e.printStackTrace();
}
}
}
```

File Before Execution:

```
21MIS1146 > Week5 > file.txt
1
```

File After Execution:

```
21MIS1146 > Week5 > file.txt
1 This text will be inside the file
```

```
//Java Program for FileInputStream
import java.io.FileInputStream;
import java.io.InputStream;
public class FIP{
public static void main(String[] args) {
byte[] a=new byte[100];
try{
InputStream i=new FileInputStream("file.txt");
System.out.println("Available bytes: "+i.available());
i.read(a);
String data=new String(a);
System.out.println(data);
i.close();
}
catch(Exception e){
e.printStackTrace();
}
}
}
```

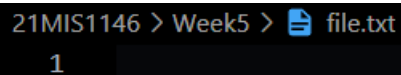
Output:

```
● stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$ java FIP.java
Available bytes: 33
This text will be inside the file
○ stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$
```

```
//Java Program for BufferedOutputStream
import java.io.*;
class BufferedOutputStreamDemo
{
    public static void main(String args[])throws Exception
    {
        FileOutputStream fout = new FileOutputStream("file.txt");
        BufferedOutputStream bout = new BufferedOutputStream(fout);
        for(int i = 65; i < 75; i++)
        {
            bout.write(i);
        }
        byte b[] = { 75, 76, 77, 78, 79, 80 };
        bout.write(b);
        bout.flush();
        bout.close();
        fout.close();
    }
}
```

Output:

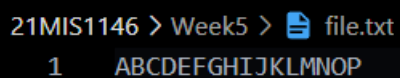
File Before Execution:



21MIS1146 > Week5 > file.txt

1

File After Execution:



21MIS1146 > Week5 > file.txt

1 ABCDEFGHIJKLMNOP

```
//Java Program for BufferedInputStream
import java.io.*;
public class BIP {
static public void readWithoutBuffer(File file){
try{
Reader i=new FileReader(file);
int data=0;
while((data=i.read())!=-1);
i.close();
}
catch(IOException e){
e.printStackTrace();
}
}
static public void readWithBuffer(File file){
try{
Reader i=new BufferedReader(new FileReader(file));
int data=0;
while((data=i.read())!=-1){}
i.close();
}
catch(IOException e){
e.printStackTrace();
}
}
public static void main(String[] args) {
File file=new File("file.txt");
long start1=System.currentTimeMillis();
readWithoutBuffer(file);
long finish1=System.currentTimeMillis();
long t1=finish1-start1;
long start2=System.currentTimeMillis();
readWithBuffer(file);
long finish2=System.currentTimeMillis();
long t2=finish2-start2;
System.out.println("Without buffering: "+t1);
System.out.println("With buffering: "+t2);
}
}
```

Output:

```
stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/week5$ java BIP.java
Without buffering: 0
With buffering: 1
```

```
// Java Program for Sequence Input Stream
import java.io.*;
public class SIP {
    public static void main(String[] args) {
        try{
            FileInputStream i1=new FileInputStream("file.txt");
            FileInputStream i2=new FileInputStream("file2.txt");
            SequenceInputStream s=new SequenceInputStream(i1, i2);
            int i;
            while((i=s.read())!=-1){
                System.out.print((char)i);
            }
            System.out.println();
            s.close();
            i1.close();
            i2.close();
        }
        catch(Exception e){
            e.printStackTrace();
        }
    }
}
```

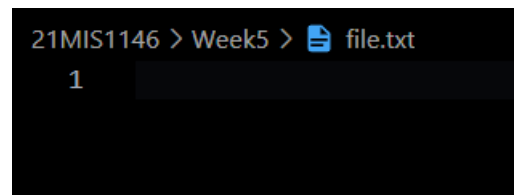
Output:

```
● stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$ java SIP.java
This is File 1 ContentThis is File 2 Content
○ stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$
```

```
// Program for ByteArrayOutputStream in Java
import java.io.*;
public class BAOS {
public static void main(String[] args) {
try{
FileOutputStream f=new FileOutputStream("file.txt");
ByteArrayOutputStream b=new ByteArrayOutputStream();
b.write(71);
b.writeTo(f);
b.flush();
b.close();
}
catch(Exception e){
e.printStackTrace();
}
}
}
```

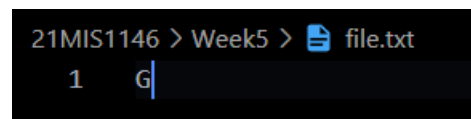
Output:

File Before Execution:



21MIS1146 > Week5 > file.txt
1

File After Execution:



21MIS1146 > Week5 > file.txt
1 G

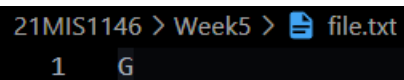
```
// Program for ByteArrayInputStream in Java
import java.io.*;
public class BAIS {
    public static void main(String[] args) {
        byte[] b={69,70,71,72};
        try{
            ByteArrayInputStream by=new ByteArrayInputStream(b);
            int k=0;
            while((k=by.read())!=-1){
                char c=(char)k;
                System.out.println("Ascii value: "+k+" char is: "+c);
            }
        }
        catch(Exception e){
            e.printStackTrace();
        }
    }
}
```


Output:

```
● stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$ java BAIS.java
  Ascii value: 69 char is: E
  Ascii value: 70 char is: F
  Ascii value: 71 char is: G
  Ascii value: 72 char is: H
○ stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$
```

```
//Program for DataOutputStream in Java
import java.io.*;
public class DOS {
    public static void main(String[] args) {
        try{
            FileOutputStream file=new FileOutputStream("file.txt");
            DataOutputStream d=new DataOutputStream(file);
            d.writeInt(71);
            d.flush();
            d.close();
        }
        catch(Exception e){
            e.printStackTrace();
        }
    }
}
```

Output:



21MIS1146 > Week5 >  file.txt

1 G


```
// Program for DataInputStream in Java
import java.io.*;
import java.util.*;
public class DIS {
public static void main(String[] args) {
try{
InputStream i=new FileInputStream("file.txt");
DataInputStream d=new DataInputStream(i);
int x=i.available();
byte[] b=new byte[x];
i.read(b);
for(byte bt:b){
char c= (char) bt;
System.out.print(c);
}
System.out.println();
}
catch(Exception e){
e.printStackTrace();
}
}
}
```

Output:

```
● stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$ java DIS.java
Aaramikkalaaangalaaaa Thakida Thak Thik Thak Thik Thakida ;)
○ stark@Suryakumar:~/Programming/Fall_Sem/Java/21MIS1146/Week5$
```