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Batch CSE-06
Branch CSE
Subject Web Tech

Assignment 13

Ques 1

```
import java.util.*;

public class Ques1 {
    public void characterFind(char ch, String s) {
        System.out.println("Character indexed at position: " +
                s + s.indexOf(ch));

public void check palindrome(String s) {
    String reverse = new StringBuffer(s).reverse().
                                        toString();
    if (s.equalsIgnoreCase(reverse)) {
        System.out.printLn(s + " is a palindrome");
    }
    else {
        Systems.out.println(s + " is not a palindrome");
    }
}
public static void main(String[] args) {

    String s1, s2;
    char ch;
    Scanner sc = new Scanner(System.in);
    Ques1 obj = new Ques1();
```

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```
System.out.println("Enter Character: ");
  ch = sc.next().charAt(0);
sc.close();
System.out.println("Length of Strings: \n s1 : " + s1.length()
    + "\n s2 : " + s2.length());

System.out.println("String 1 is equal to String 2: " +
            s1.equalsIgnoreCase(s2));

obj.characterFind(ch, s1);
obj.characterFind(ch, s2);
obj.checkPalindrome(s1);
obj.checkPalindrome(s2);

System.out.println("Upper case & Lower case: ");
System.out.println(s1.toUpperCase() + " " + s1.toLowerCase() +
        "\n" + s2.toUpperCase() + " " + s2.toLowerCase());
}
}
```

```
Run: Ques1 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\java.exe"
Enter the strings :
nikhil
nikhil
Enter the character :
n
Length of the strings :
s1 : 6
s2 : 6
String 1 is equal to String 2 : true
Character indexed at position : nikhil0
Character indexed at position : nikhil0
nikhil is not a palindrome
nikhil is not a palindrome
Upper case and lower case:
NIKHIL nikhil
NIKHIL nikhil

Process finished with exit code 0
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Ques 2

```
import java.util.Arrays;

public class Ques2 {
    public static void main(String[] args) {

        String s1 = "  ";
        System.out.print("String s1 is empty: " + s1.isEmpty());
        s1 = String.join(" ", "Nikhil", "Gupta");
        System.out.println("Replaced String is: " +
            s1.replace('a', 'A'));

        System.out.println("The substring is: " + s1.substring
                                                    (0, 5));

        String[] s2 = s1.split(" ", 3);

        System.out.println("Splitted String: " + Arrays.toString
                                                    (s2));

    }
}
```

```
Run:  Ques2 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\
String s1 is empty : true
The joined string is : Nikhil Gupta
The replaced string is : Nikhil GuptA
The substring is : Nikhi
The split string is : [Nikhil, Gupta]

Process finished with exit code 0
```

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Ques 3

```
public class Ques3 {
  public static void main(String[] args) {
    String s = "Java is my Favourite Programming Language";

    System.out.println("Base String" + s);

    StringBuffer s1 = new StringBuffer("Hi, ");

    System.out.println("Append : " + s1.append(s));

    System.out.println("Insert : " + s1.insert(5, "not"));

    s1.delete(2, 3);

    System.out.println("Delete : " + s1.delete(3, 4));

    System.out.println("capacity Now : " + s1.capacity());

    s1.ensureCapacity(92);

    System.out.println("Ensure Capacity \n Capacity now : " +
                                        s1.capacity());
    System.out.println("Reverse : " + s1.reverse());
  }
}
```

```
Run:  Ques3 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\java.exe"
Base string : Java is my favorite Programming Language
Append : Hi, Java is my favorite Programming Language
Insert : Hi, Java is not my favorite Programming Language
Delete : Hi Java is ny favorite Programming Language
Capacity now : 90
Ensure Capacity
Capacity now : 182
Reverse : egaugnaL gnimmargorP etirovaf yn si avaJ iH
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```

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Ques 4

```
public class Ques4 {
    public static void main(String[] args) {

        StringBuffer s;

    System.out.println("Constructors");

    s= new StringBuffer();

    System.out.println(s+"Capacity : " +s.capacity());

    s= new StringBuffer("Nikhil ");

    System.out.println(s+ "Capacity : " +s.capacity());

    CharSequence c = new StringBuilder("Nikhil Gupta");

    s= new StringBuffer(c);

    System.out.println(s + "capacity : " + s.capacity());

    s.setLength(20);

    System.out.println("Set Length(20) : " + s);

    System.out.println("charAt(6) : " + s.charAt(6));

    s.setCharAt(6, 'k');

    System.out.println("setCharAt(6, 'k'): " + s);
```

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```
s.deleteCharAt(6);
System.out.paintLn("deleteCharAt(6) : " + s);
}
}
```

```
Run:  Ques4 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\java.
Constructors of String buffer :
Capacity : 16
Capacity : 10
Nikhil Capacity : 23
Nikhil GuptaCapacity : 28
setlength(10) : Nikhil Gup
charAt(6) :
setCharAt(6,'k') : NikhilkGup
deleteCharAt(6) : NikhilGup
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```

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Ques 5

```
import java.util.Arrays;

public class Ques5 {
    public static void main(String[] args) {
        int n=10;
        int arr[] = {1, 2, 3};

        String s = String.valueOf(n) + " Nikhil";
        System.out.println("ValueOf() : " + s);
        s = Arrays.toString(arr);
        System.out.println("toString() : " + s);
    }
}
```

```
Run:  Ques5 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\
valueOf() : 13 Nikhil
toString() : [1, 2, 3]

Process finished with exit code 0
```

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Ques 6

```
import java.util.Arrays;

public class Ques6 {
    public static void main(String[] args) {
        String s = new String("Nikhil Gupta");
        char[] ch = new char[10];
        s.getChars(0, 5, ch, 0);
        System.out.println("getChars(0,5,ch,0): " +
                                Arrays.toString(ch));

        System.out.println("getBytes(): " + Arrays.to
                                String(s.getBytes()));

        System.out.println("toCharArray(): " + Arrays.to
                                String(s.toCharArray()));

        System.out.println("NikhIL.equalsIgnoreCase(nIKHiL): " +
                "NikhIL".equalsIgnoreCase("nIKHiL"));

    }
}
```

```
Run:  Ques6 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\java.exe" "-javaage
getChars(0,5,ch,0) : [N, i, k, h, i, 0, 0, 0, 0, 0]
getBytes() : [78, 105, 107, 104, 105, 108, 32, 71, 117, 112, 116, 97]
toCharArray() : [N, i, k, h, i, l,  , G, u, p, t, a]
NikhIl.equalsIgnoreCase(nIKHil) : true

Process finished with exit code 0
```

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Ques 7

```
public class Ques7 {
    public static void main(String[] args) {
        String s1 = "Nikhil";
        String s2 = "Gupta";
    System.out.println("s1.regionMatches():" + s1.regionMatches
                                                (1, 1, 3));
    System.out.println("s1.startsWith():" + s1.startsWith("Nik",
                                                1));

    System.out.println("s1.startsWith():" + s1.startsWith("Gup"));

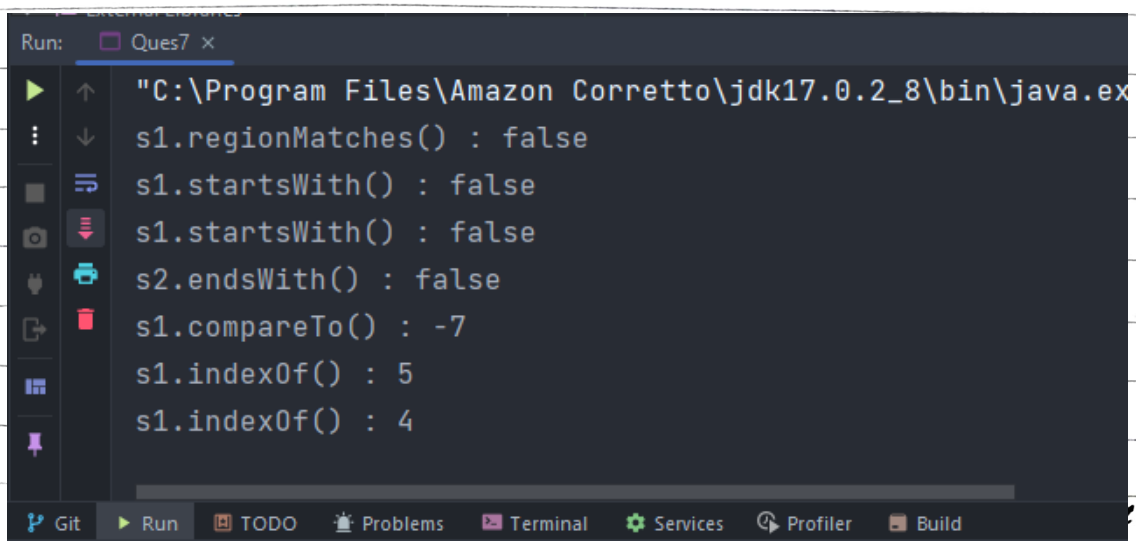
    ~~System.out.println("s1.startsWith()~~

    System.out.println("s2.endsWith():"+s2.endsWith("hil"));

    System.out.println("s1.compareTo():"+s2.compareTo(s1));

        s1 = s1 + " " + s2;

    System.out.println("s1.indexOf():" + s1.indexOf('L'));
    System.out.println("s1.indexOf(iL):" + s1.indexOf('L', 5));
```



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Ques 8

```
import java.io.*;

public class Ques8 {
  public static void main(String[] args) throws IOException
  {
  FileInputStream in = new FileInputStream("E:/4th Sem/Web
  Tech Lab/Java Lab/Lab 10/input.txt");

  FileInputStream out= new FileOutputStream("E:/4th Sem/
  Web Tech Lab/Java Lab/Lab10/output.txt");

  int r;
 System.out.println("Reading & Writing from & to file");
    while((r = in.read()) != -1) {
 System.out.println((char) r);
    out.write(r);
 }
   in.close();
   out.close();

 System.out.println("\n");
   r=0;
 System.out.println("Reading & Writing from & to file");
 FileReader inc = new FileReader("E:/4th Sem/Web Tech Lab/
   Java Lab/Lab10/inputc.txt");

 FileReader out = newFile      ("E:/4th Sem/Web Tech Lab/ Java
                Lab/Lab10/ outputc.txt");

   while((r = inc.read()) != -1) {
```

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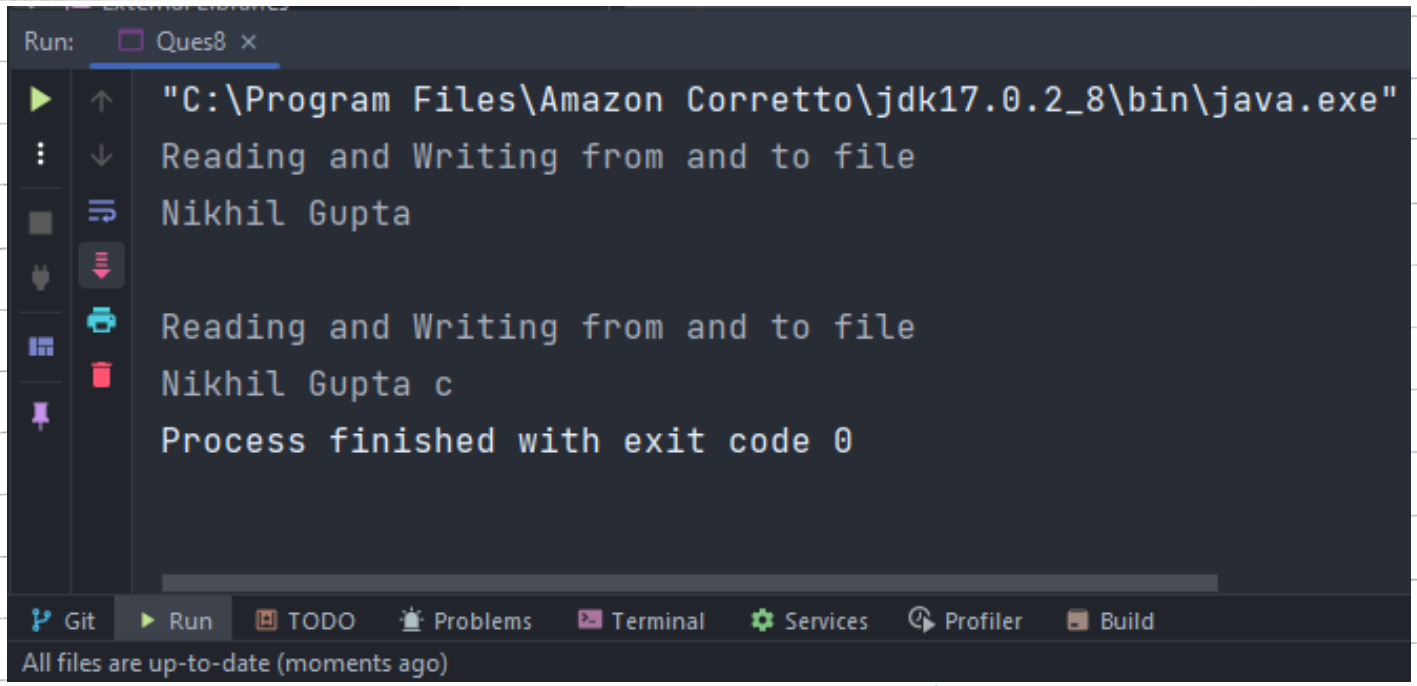
```
            outc.write(97);
        System.out.println((char)r);
    }
    inc.close();
    outc.close();
  }
}
```



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Ques 9

```
import java.io.*;
import java.util.*;

public class Ques9 {
    public static void main(String[] args) throws IOExcep
    {
        Scanner sc = new Scanner(System.in);
        int r;
    System.out.println("Enter details of Student: \n Roll No.,
        Name, Subject Name, Marks: ");

    int roll = sc.nextInt();
        sc.nextLine();
    String name = sc.nextLine();
    String sbjname = sc.nextLine();
     int marks = sc.nextInt();
    sc.close();

FileWriter fout = new FileWriter("E:/4th Sem/WebTech La
    Java Lab/Lab10/student.txt");

FileInputStream fin = new FileInputStream("E:/4th Sem/
    Tech Lab/Java Lab/Lab10/student.txt");

System.out.println("Writing to file");

fout.write("Roll: " + roll + "\nName: " + name + "\n Subje
    Name: " + subName + "\nMarks: " + marks);
fout.close();
```

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```
System.out.println("Reading & Printing");
while ((r = fin.read()) != -1) {
    System.out.print((char) r);
}
fin.close();
}
```

```
Run:  Ques9 ×
"C:\Program Files\Amazon Corretto\jdk17.0.2_8\bin\j
Enter details of Student :
Roll, Name, Subject Name, Marks :
1479
Nikhil
Web Tech
89
Writing to file
Reading and Printing details from file
Roll : 1479
Name : Nikhil
Subject Name : Web Tech
Marks : 89
Process finished with exit code 0
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Ques 10

```
import java.io.*;

public class Ques10 {
    public static void main(String[] args) {
        FileReverse obj = new FileReverse();
        obj.Reverse();
    }
}

class FileReverse {
    File f, f2;
    String str;

    FileReverse() {
        f = new File("E:/4th Sem/WebTech Lab/Lab10/
                                    input.txt");
    }
    void reverse() {
        try {
            RandomAccessFile file = new RandomAccessFile(f, "r");
            Long n = f.length() - 1;
            int i = 0;
            while (n >= 0) {
                if (n == -1)
                    break;
                else {
                    file.seek(n);
                    i = file.read();
                    n = n - 1;
                    System.out.println((char) i);
                }
```

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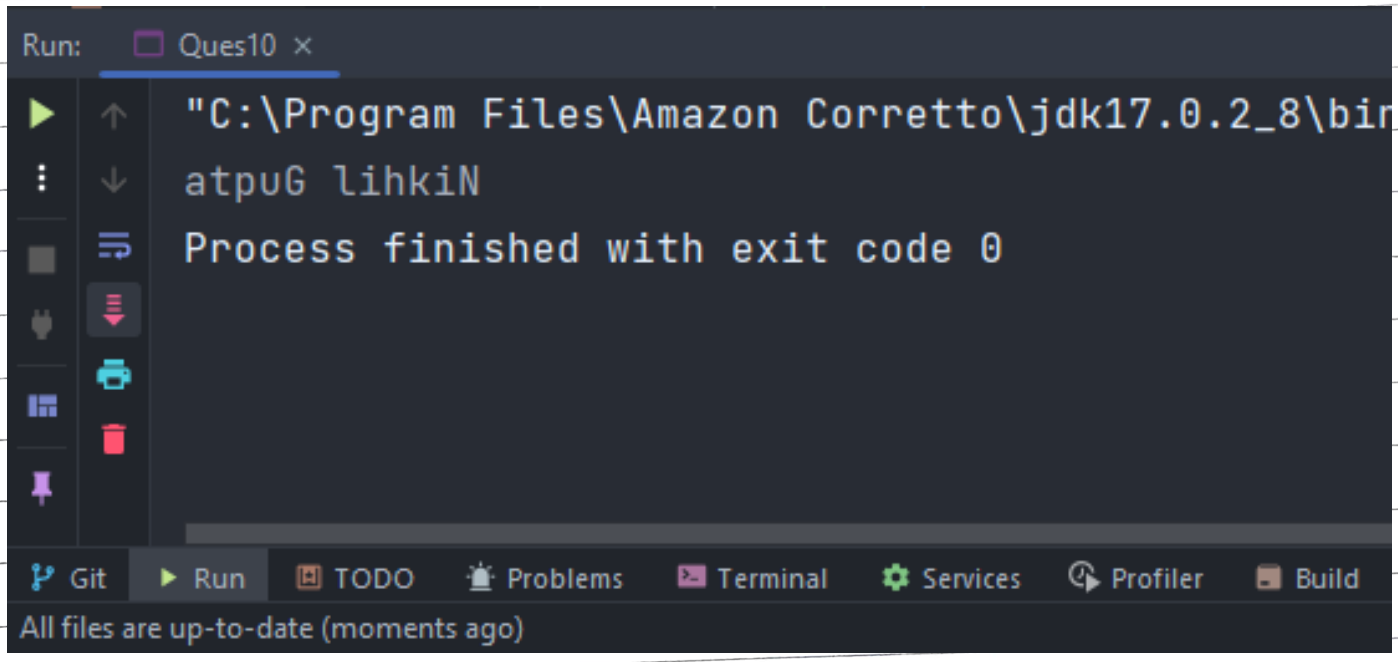
```
    }
    file.close();
    } catch (Exception e) {
        System.out.println(e);
    }
}
}
```