OOP Submission Report

Week 11

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CSE 3

Concat and substring

Output

```
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> javac .\concat.java
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> java concat
Enter two strings :
potato
 melon
Enter start index  : 1
Enter end index  : 4
ota
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11>
```

Code

```java
import java.util.*;

public class concat{
    public static void main(String[] args) {
        System.out.println("Enter two strings : ");
        Scanner scanner = new Scanner(System.in);
        String str1 = scanner.nextLine();
        String str2 = scanner.nextLine();

        String concat_string = str1+str2;

        System.out.print("Enter start index  : ");
        int index1 = scanner.nextInt();
        System.out.print("Enter end index  : ");
        int index2 = scanner.nextInt();

        String sub_string = concat_string.substring(index1,index2);
        System.out.println(sub_string);


        scanner.close();

        // System.out.println(str1+str2);
```

```
        // System.out.println(str2);



    }
}
```

Reverse and Replace

Output

```
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> javac .\buffer_replace.ja
va
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> java buffer_replace
String buffer : Laughing Fox laughed at a crying fox crying
Reversed buffer : gniyrc xof gniyrc a ta dehgual xoF gnihguaL
After replacing : Angry Fox laughed at a crying fox crying
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11>
```

Code

```
import java.util.*;

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

        StringBuffer buff = new StringBuffer();

        String str = new String("Laughing Fox laughed at a crying fox
crying");

        buff.append(str);

        int index1 = 0,index2 = 8;

        System.out.println("String buffer : " + str);
        buff.reverse();
        System.out.println("Reversed buffer : " + buff);
        buff.reverse();
        buff.replace(index1, index2, "Angry");
        System.out.println("After replacing : " + buff.toString());
    }
}
```

String Compare

Output

```
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> javac equals.java
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> java equals
potato and potato      are : false
potato and potat0 are : false
potato and potato are : true
potato and Potato are : false
potato and POTATO are : false
potato and potato are : true
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11>
```

Code

```
class Compare{
    public boolean compare_str(String str1,String str2){
        if(str1 == null || str2 == null){return false;}
        if(str1.length() != str2.length()){
            return false;
        }
        for(int i=0; i < str1.length() ; i++){
            if  (str1.charAt(i) != str2.charAt(i)){
                return false;
            }
        }
        return true;
    }
}


public class equals {
    public static void main(String[] args) {
        String str = new String("potato");
        String str1 = new String("potato     ");
        String str2 = new String("potat0");
        String str3 = new String("potato");
        String str4 = new String("Potato");
        String str5 = new String("POTATO");
        String str6 = new String("potato");


        Compare comparator = new Compare();

        System.out.println(str + " and "+str1+" are :
"+comparator.compare_str(str, str1));
        System.out.println(str + " and "+str2+" are :
"+comparator.compare_str(str, str2));
        System.out.println(str + " and "+str3+" are :
"+comparator.compare_str(str, str3));
```

```
        System.out.println(str + " and "+str4+" are :
"+comparator.compare_str(str, str4));
        System.out.println(str + " and "+str5+" are :
"+comparator.compare_str(str, str5));
        System.out.println(str + " and "+str6+" are :
"+comparator.compare_str(str, str));
    }
}
```

StringBuffer Append and insert

Output

```
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> javac string_buff.java
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> java string_buff
potato  melon
After inserting 'juice' at index 7 string is : potato juice melon
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11>
```

Code

```
public class string_buff{
    public static void main(String[] args) {
        StringBuffer buff1 = new StringBuffer("potato  ");
        StringBuffer buff2 = new StringBuffer("melon");

        buff1.append(buff2);

        int index = 7;

        String temp = "juice";

        System.out.println(buff1);
        System.out.println("After inserting '"+temp+"' at index "+index+"
string is : "+buff1.insert(index, temp));
    }
}
```

Palindrome check

Output

```
After inserting 'juice' at index 7 string is : potato juice melon
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> javac .\palindrome.java
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11> java palindrome
Checking if racecar is a Palindrome true
Checking if racecar is a Palindrome using buffer true
Checking if potato is a Palindrome false
Checking if potato is a Palindrome using buffer false
PS D:\Mahindra Notes and schedule\Semester 5\OOPs\Lab\lab_works\week-11>
```

Code

```
import java.nio.Buffer;

class Checker{
    public boolean palindrome_checker_string(String str1){
        if(str1 == null){return false;}
        int len = str1.length();
        for(int i=0; i < len ; i++){
            if  (str1.charAt(i) != str1.charAt(len-i-1)){
                return false;
            }
        }
        return true;
    }
    public boolean palindrome_checker_buffer(StringBuffer buff1){
        if(buff1 == null){return false;}

        int len = buff1.length();
        for(int i=0; i < len ; i++){
            if  (buff1.charAt(i) != buff1.charAt(len-i-1)){
                return false;
            }
        }
        return true;

    }
}

public class palindrome {
    public static void main(String[] args) {
        Checker obj = new Checker();

        String str1 = "racecar";
        StringBuffer buff1 = new StringBuffer(str1);

        String str2 = "potato";
        StringBuffer buff2 = new StringBuffer(str2);


        System.out.println("Checking if "+str1+" is a Palindrome
"+obj.palindrome_checker_string(str1));
        System.out.println("Checking if "+str1+" is a Palindrome using buffer
"+obj.palindrome_checker_buffer(buff1));

        System.out.println("Checking if "+str2+" is a Palindrome
"+obj.palindrome_checker_string(str2));
        System.out.println("Checking if "+str2+" is a Palindrome using buffer
"+obj.palindrome_checker_buffer(buff2));
```

```
    }
}
```