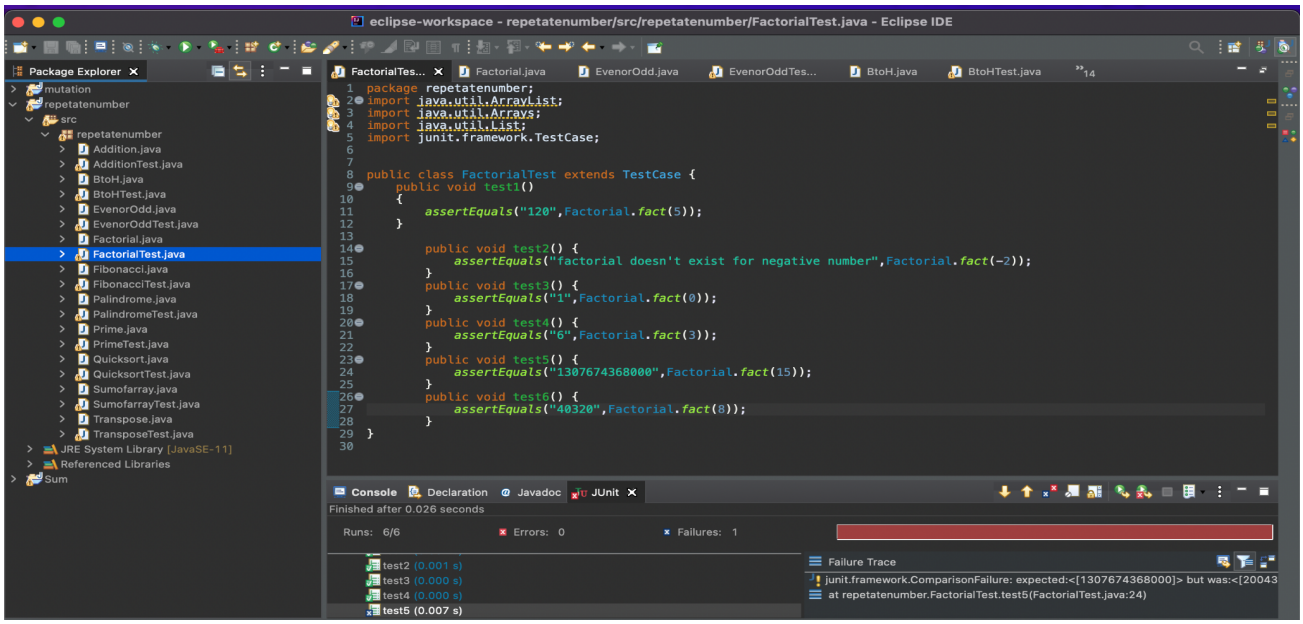
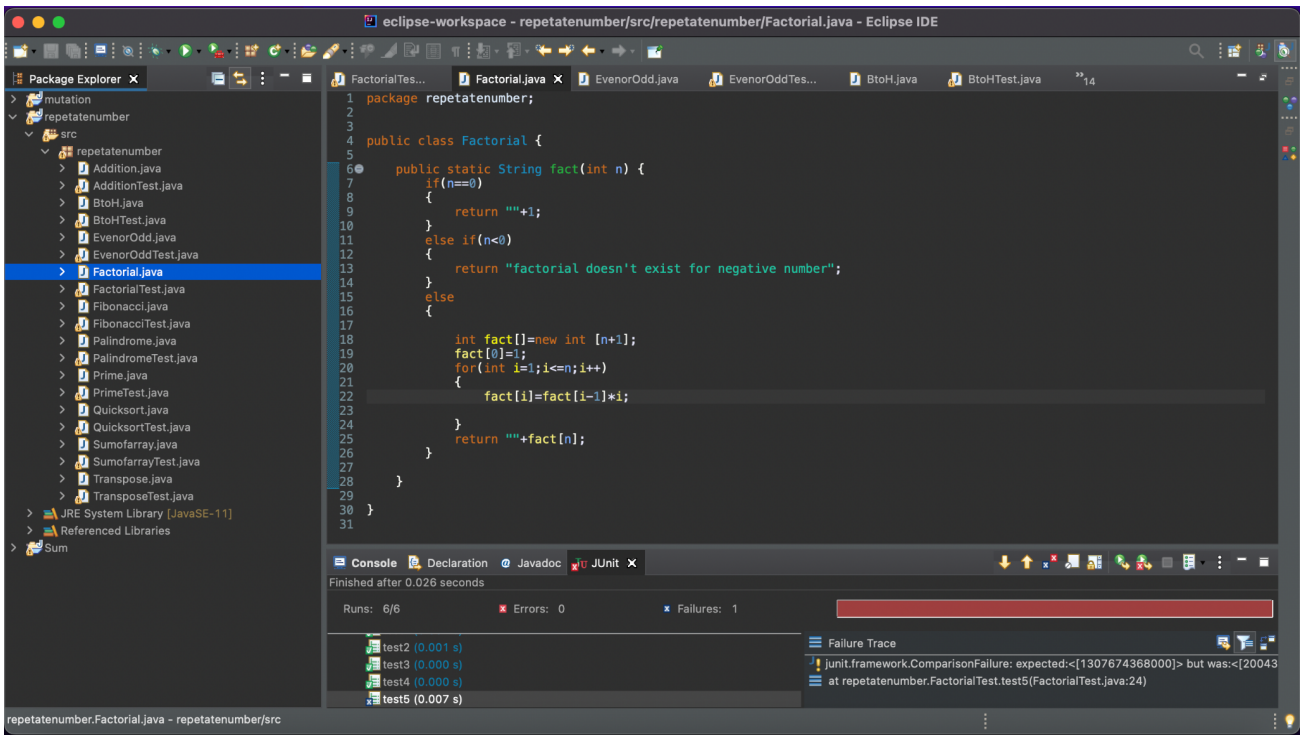
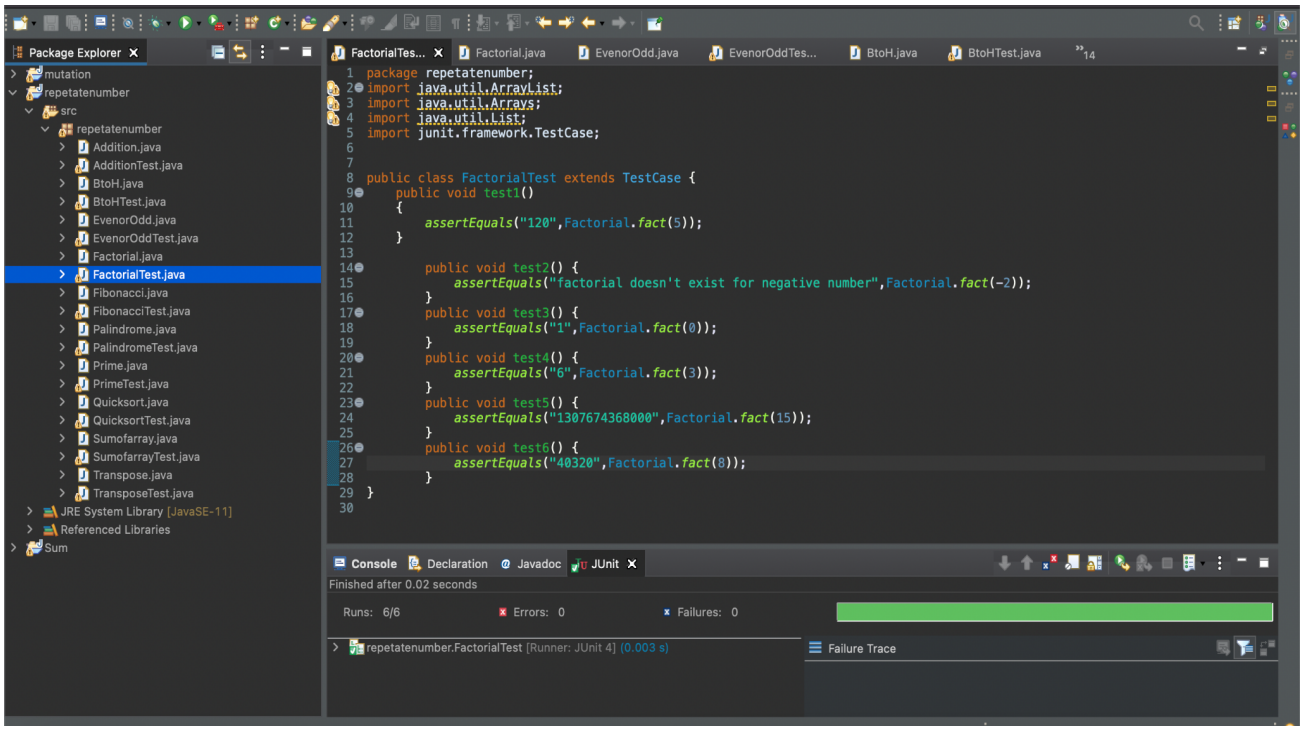
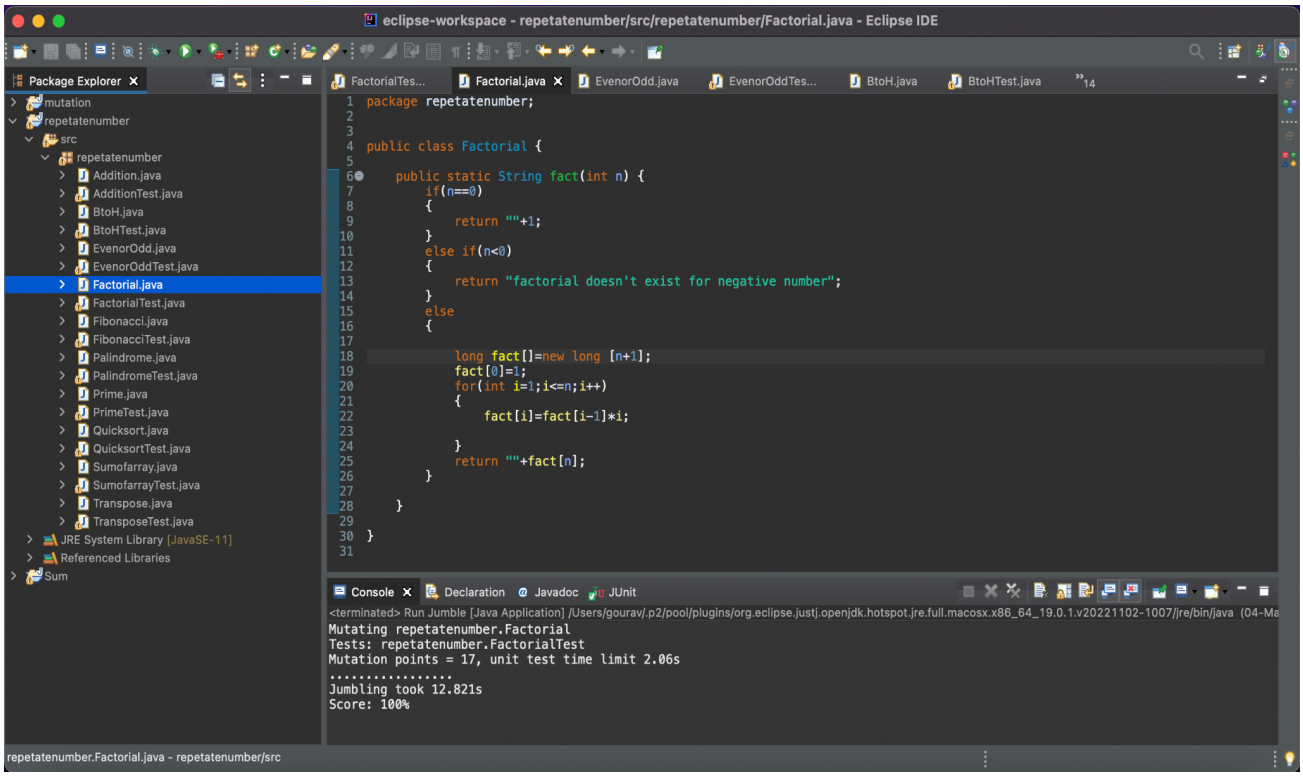
SOFTWARE TESTING LAB ASSIGNMENT-6

Q.1 Write a program to generate a Factorial of numbers (where stack length Should be at 3 (max)). The numbers should be 5, 3, 8, and 15.






Package Explorer
mutation
repetatenumber
src
repetatenumber
Addition.java
AdditionTest.java
BtoH.java
BtoHTest.java
EvenorOdd.java
EvenorOddTest.java
Factorial.java
FactorialTest.java
Fibonacci.java
FibonacciTest.java
Palindrome.java
PalindromeTest.java
Prime.java
PrimeTest.java
Quicksort.java
QuicksortTest.java
Sumofarray.java
SumofarrayTest.java
Transpose.java
TransposeTest.java
JRE System Library [JavaSE-11]
Referenced Libraries
Sum
FactorialTes...
Factorial.java
EvenorOdd.java
EvenorOddTes...
BtoH.java
BtoHTest.java
14
1 package repetatenumber;
2 import java.util.ArrayList;
3 import java.util.Arrays;
4 import java.util.List;
5 import junit.framework.TestCase;
6
7
8 public class FactorialTest extends TestCase {
9 public void test1()
10 {
11 assertEquals("120",Factorial.fact(5));
12 }
13
14 public void test2() {
15 assertEquals("factorial doesn't exist for negative number",Factorial.fact(-2));
16 }
17 public void test3() {
18 assertEquals("1",Factorial.fact(0));
19 }
20 public void test4() {
21 assertEquals("6",Factorial.fact(3));
22 }
23 public void test5() {
24 assertEquals("1307674368000",Factorial.fact(15));
25 }
26 public void test6() {
27 assertEquals("40320",Factorial.fact(8));
28 }
29 }
30
Console
Declaration
Javadoc
JUnit
Finished after 0.02 seconds
Runs: 6/6
Errors: 0
Failures: 0
repetatenumber.FactorialTest [Runner: JUnit 4] (0.003 s)
Failure Trace


eclipse-workspace - repetatenumber/src/repetatenumber/Factorial.java - Eclipse IDE
Package Explorer
mutation
repetatenumber
src
repetatenumber
Addition.java
AdditionTest.java
BtoH.java
BtoHTest.java
EvenorOdd.java
EvenorOddTest.java
Factorial.java
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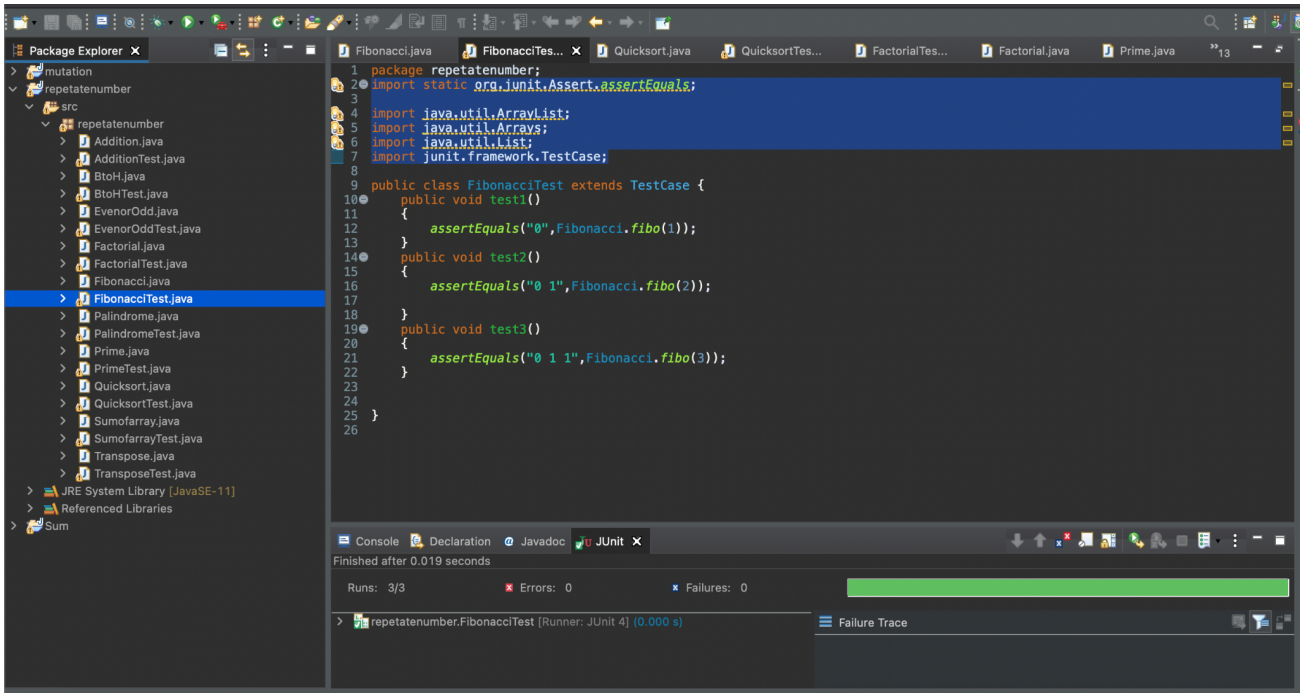
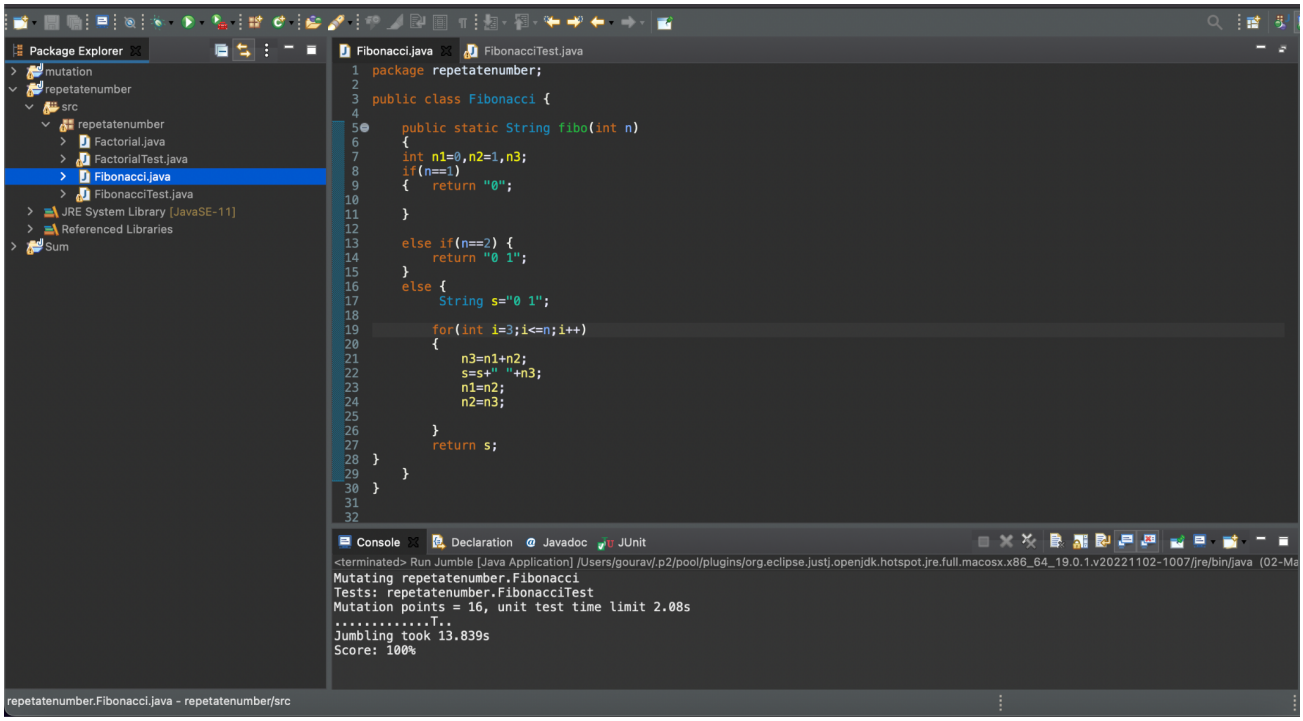
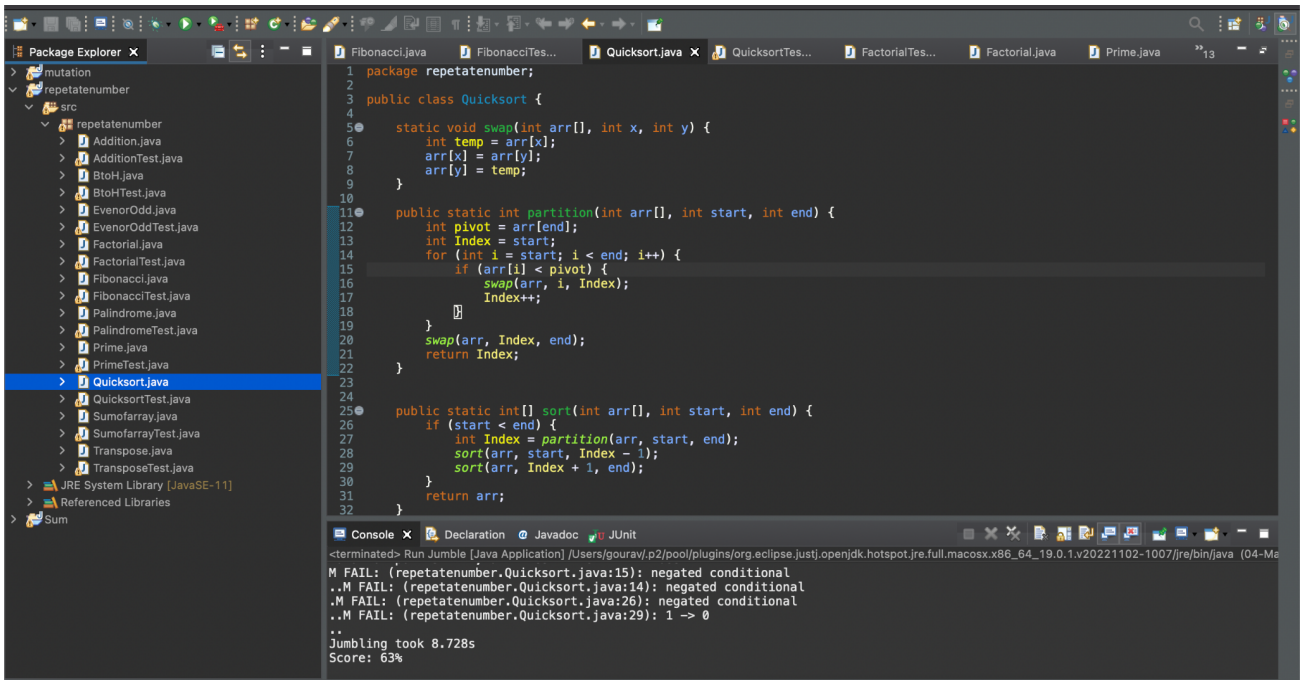
JRE System Library [JavaSE-11]
Referenced Libraries
Sum
FactorialTes...
Factorial.java
EvenorOdd.java
EvenorOddTes...
BtoH.java
BtoHTest.java
14
1 package repetatenumber;
2
3
4 public class Factorial {
5
6 public static String fact(int n) {
7 if(n==0)
8 {
9 return ""+1;
10 }
11 else if(n<0)
12 {
13 return "factorial doesn't exist for negative number";
14 }
15 else
16 {
17
18 long fact[]=new long [n+1];
19 fact[0]=1;
20 for(int i=1;i<=n;i++)
21 {
22 fact[i]=fact[i-1]*i;
23
24 }
25 return ""+fact[n];
26 }
27
28 }
29
30 }
31
Console
Declaration
Javadoc
JUnit
<terminated> Run Jumble [Java Application] /Users/gourav/.p2/pool/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.macosx.x86_64_19.0.1.v20221102-1007/jre/bin/java (04-Ma
Mutating repetatenumber.Factorial
Tests: repetatenumber.FactorialTest
Mutation points = 17, unit test time limit 2.06s
....
Jumbling took 12.821s
Score: 100%
repetatenumber.Factorial.java - repetatenumber/src

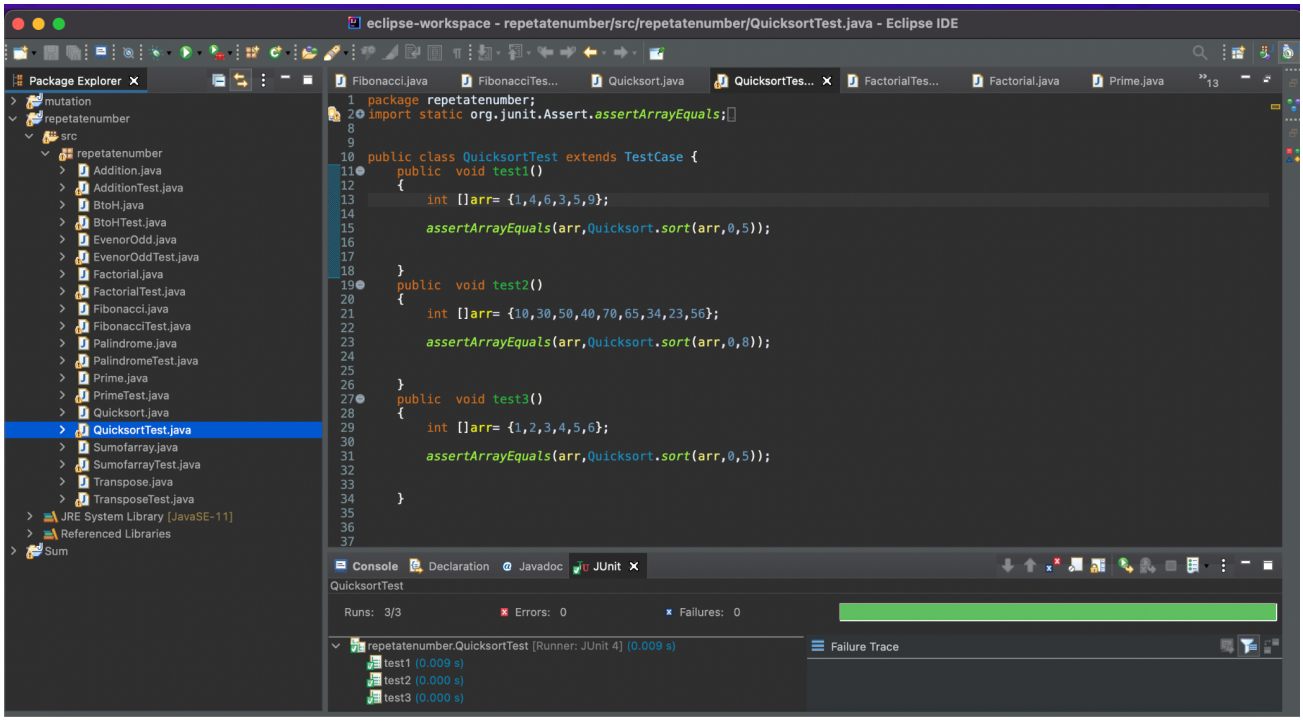
Q.2 Write a program to generate Fibonacci numbers.



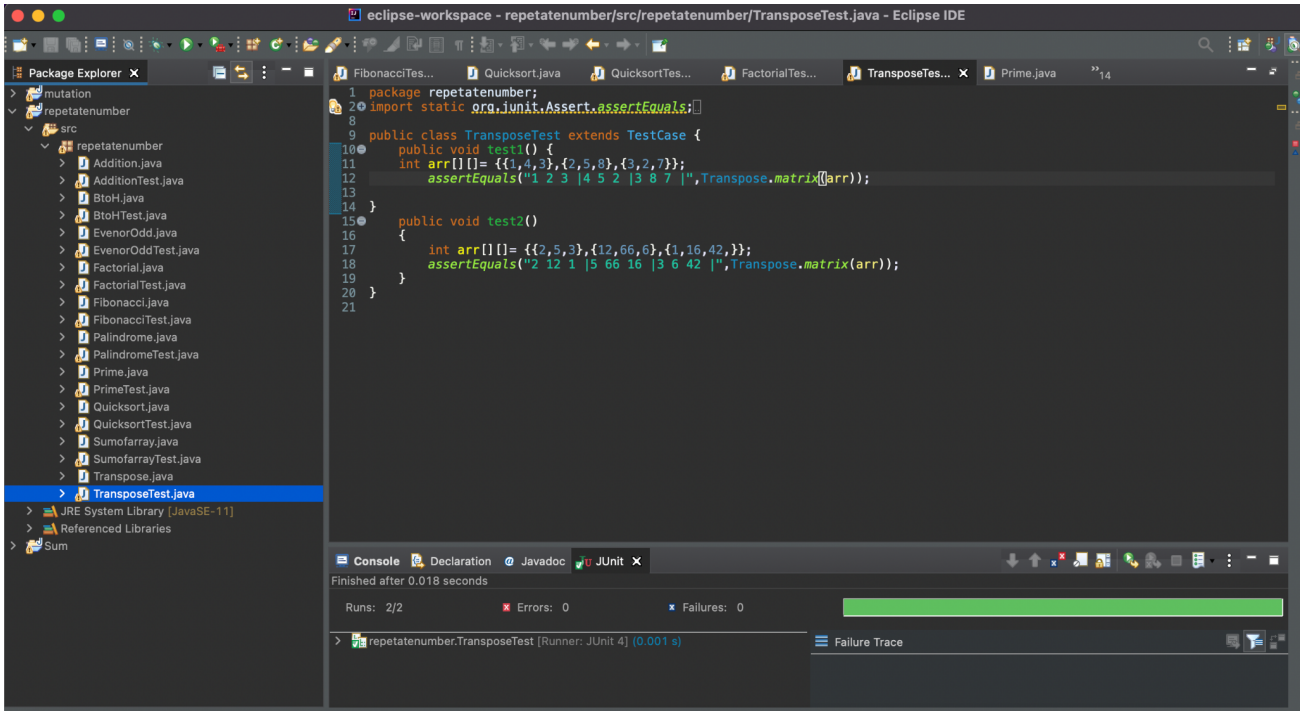


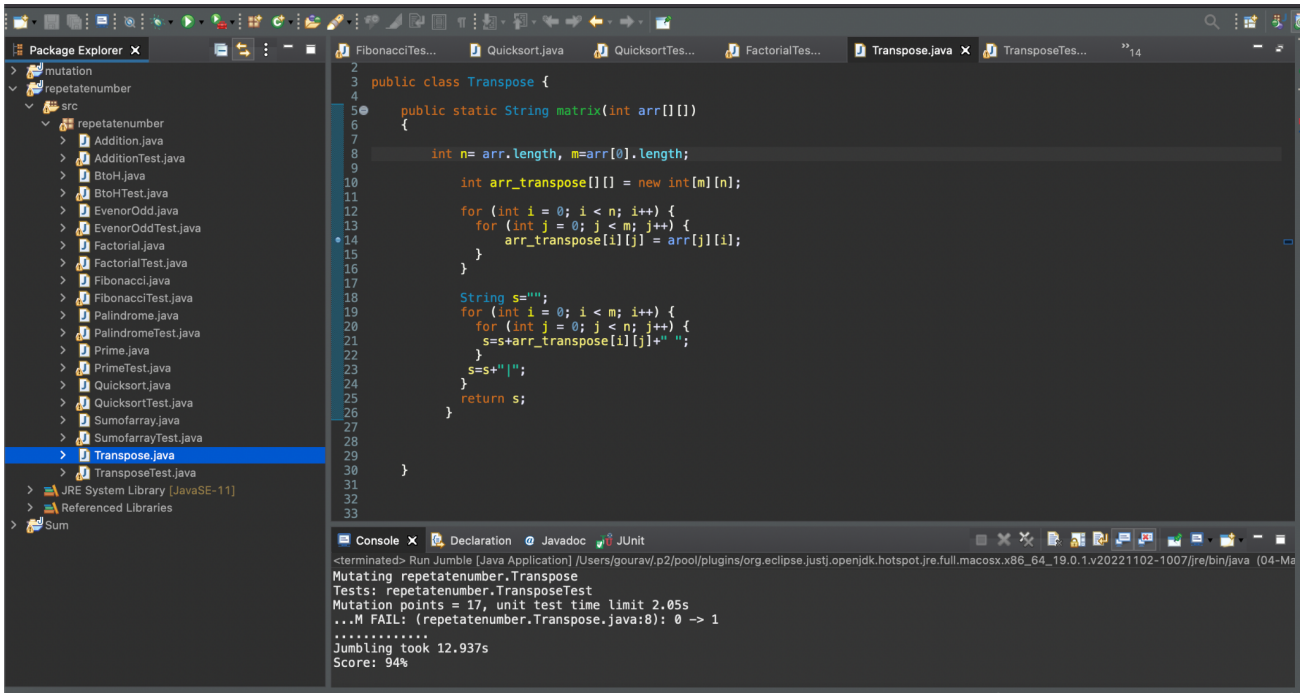
Q.3 Write a program that performs sorting of a group of integer values using a quick sort technique.



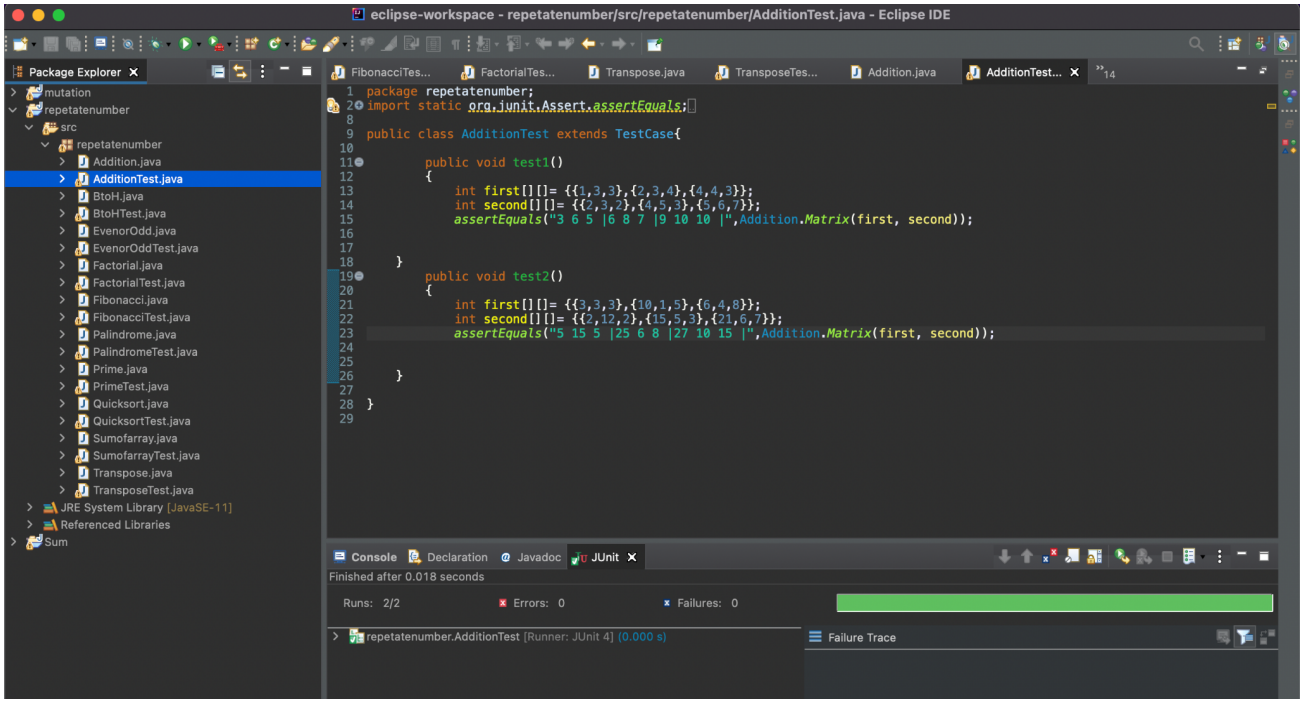


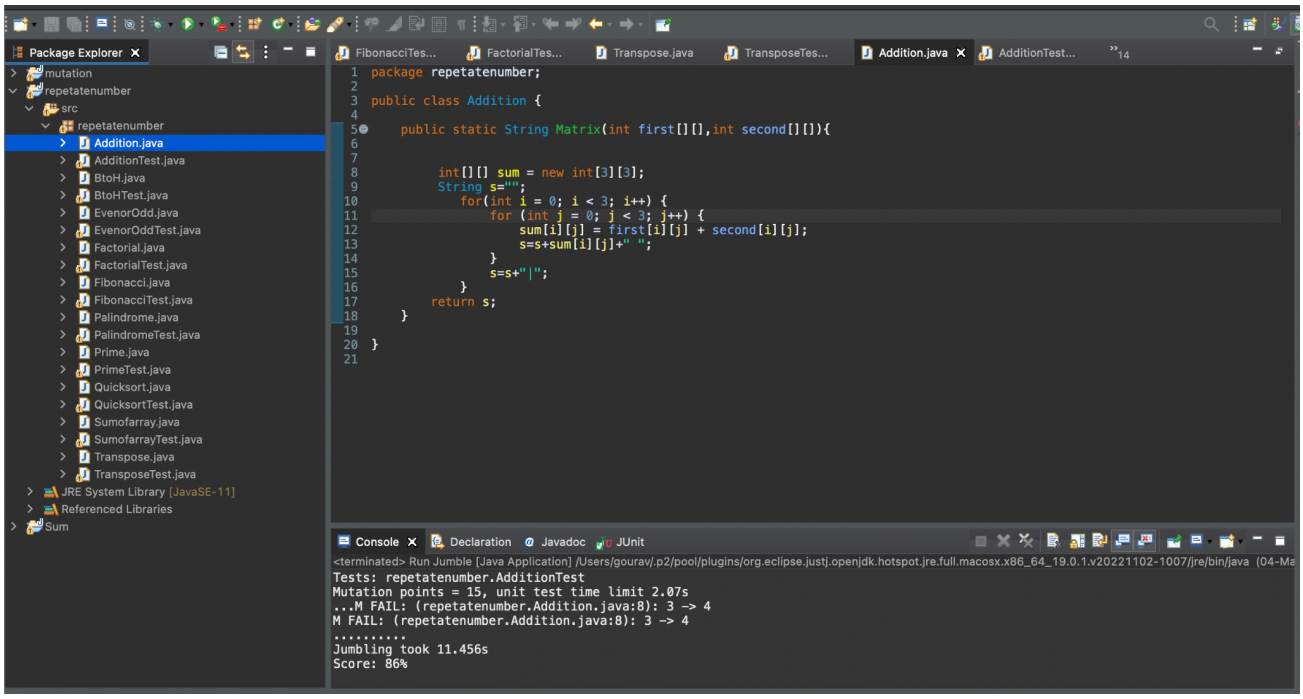
Q.4 Write a program that accepts elements of a matrix and displays its transpose.



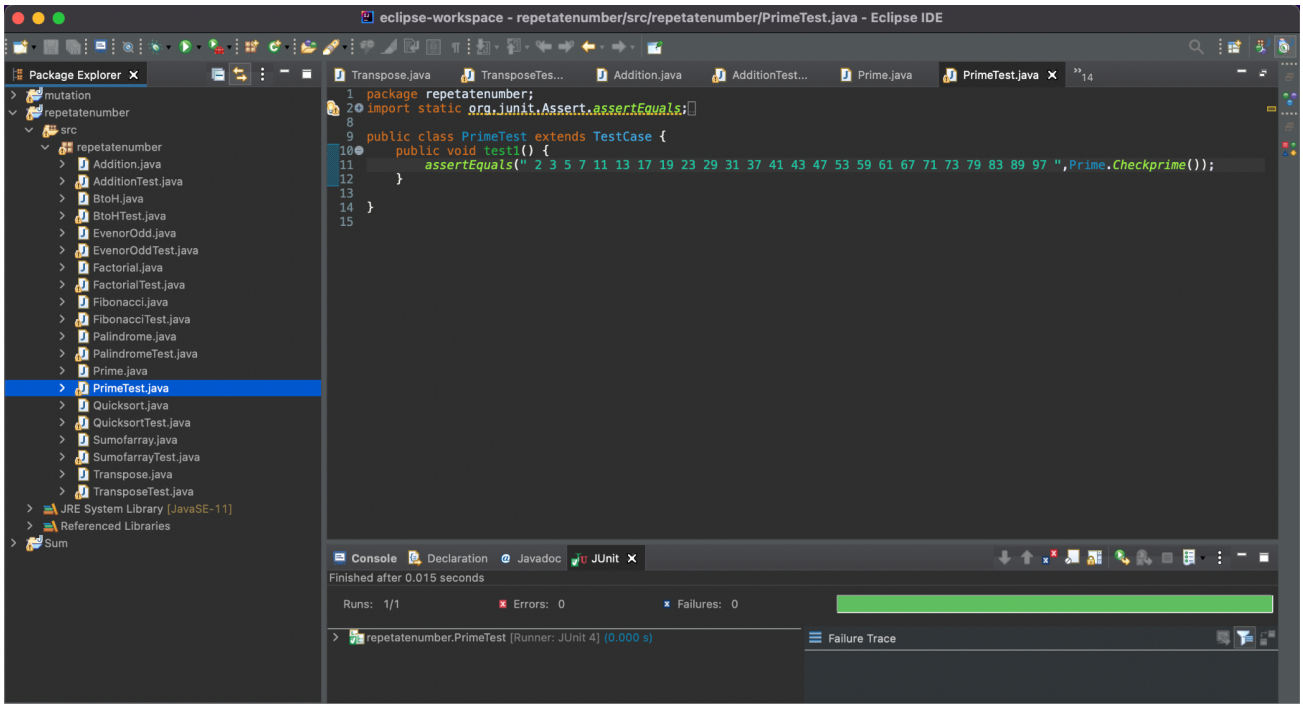


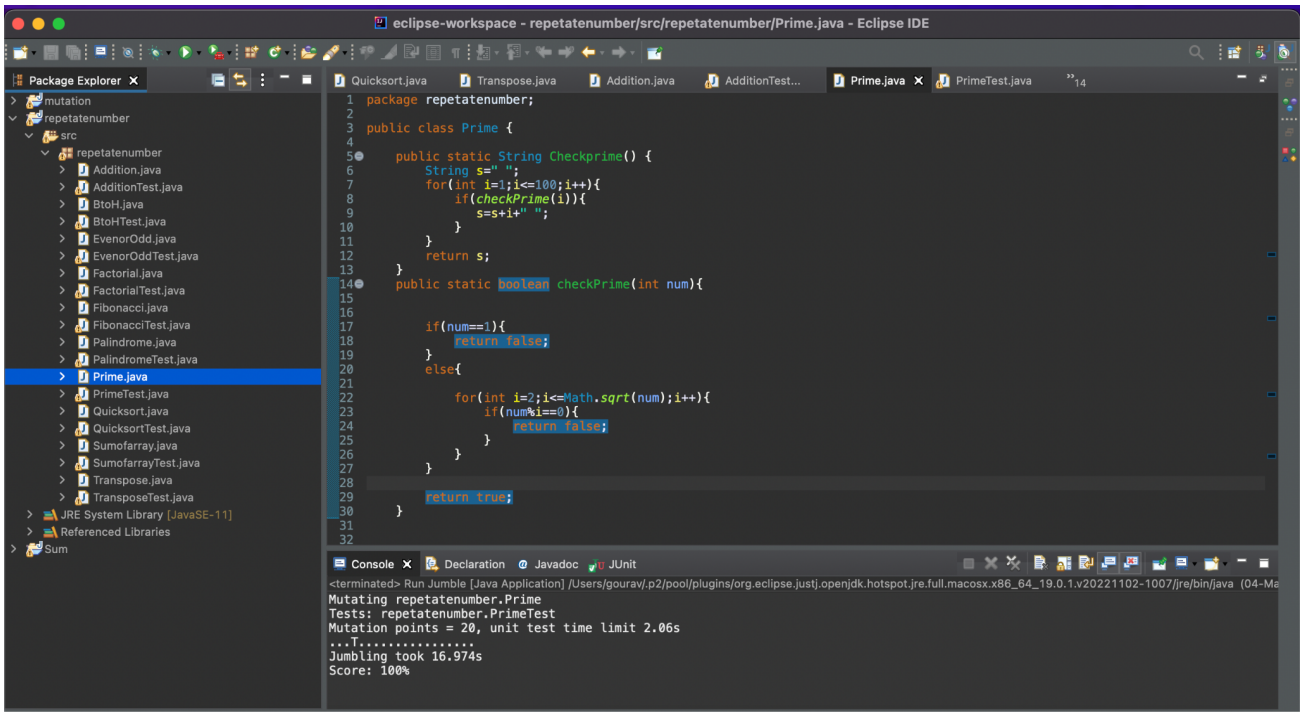
Q.5 Write a program to add two matrices and display the sum matrix.



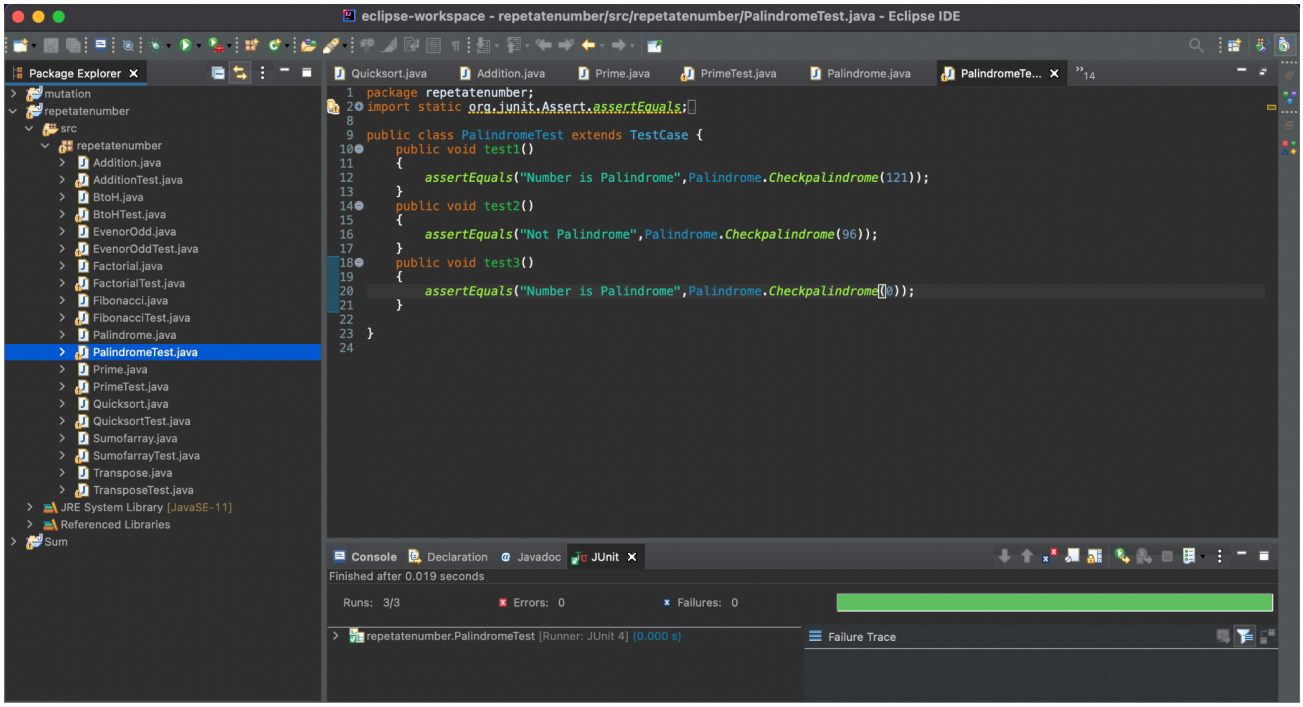


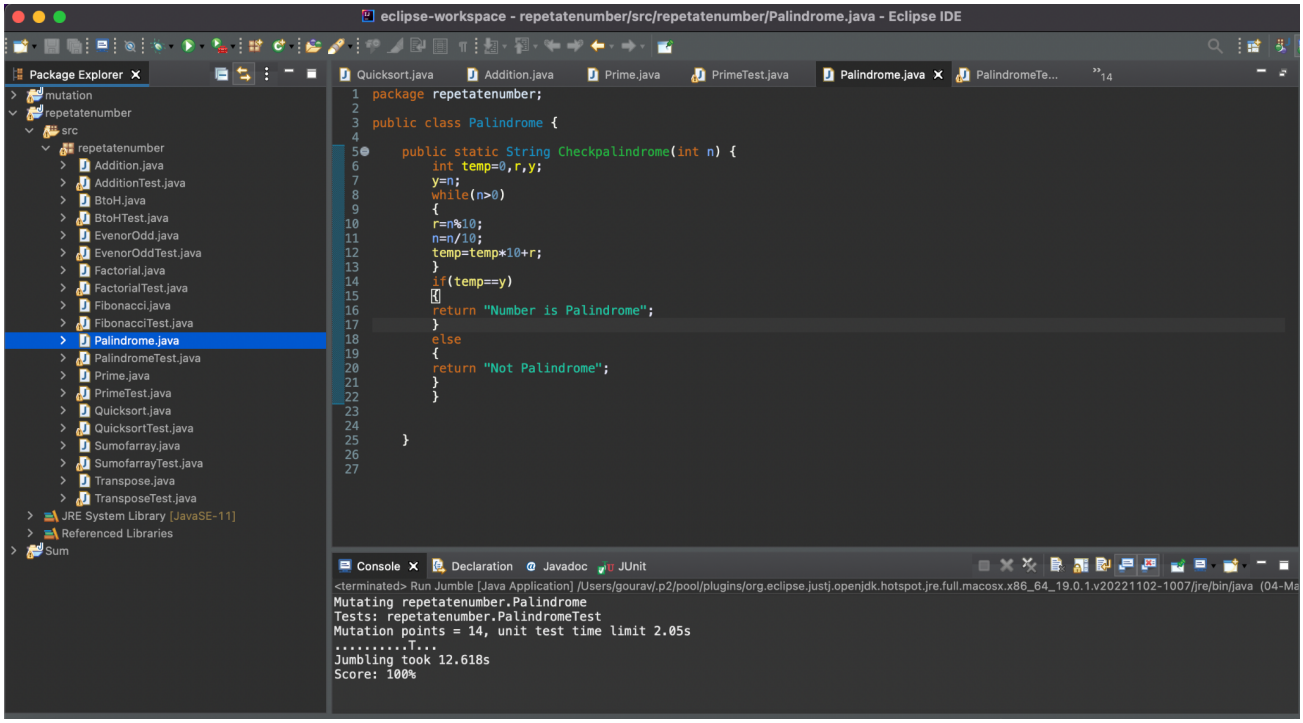
Q.6 Write a program to Print Prime Numbers from 1 to 100 using Scanner Class and For Loop.



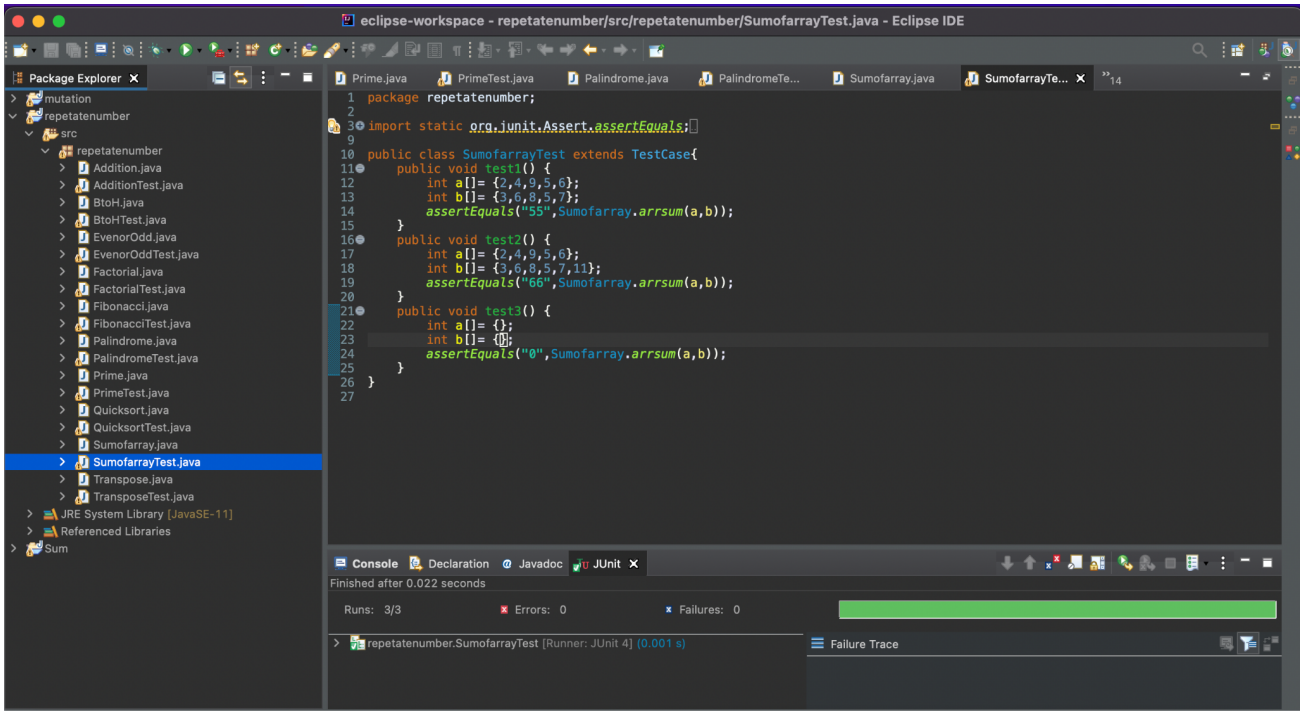


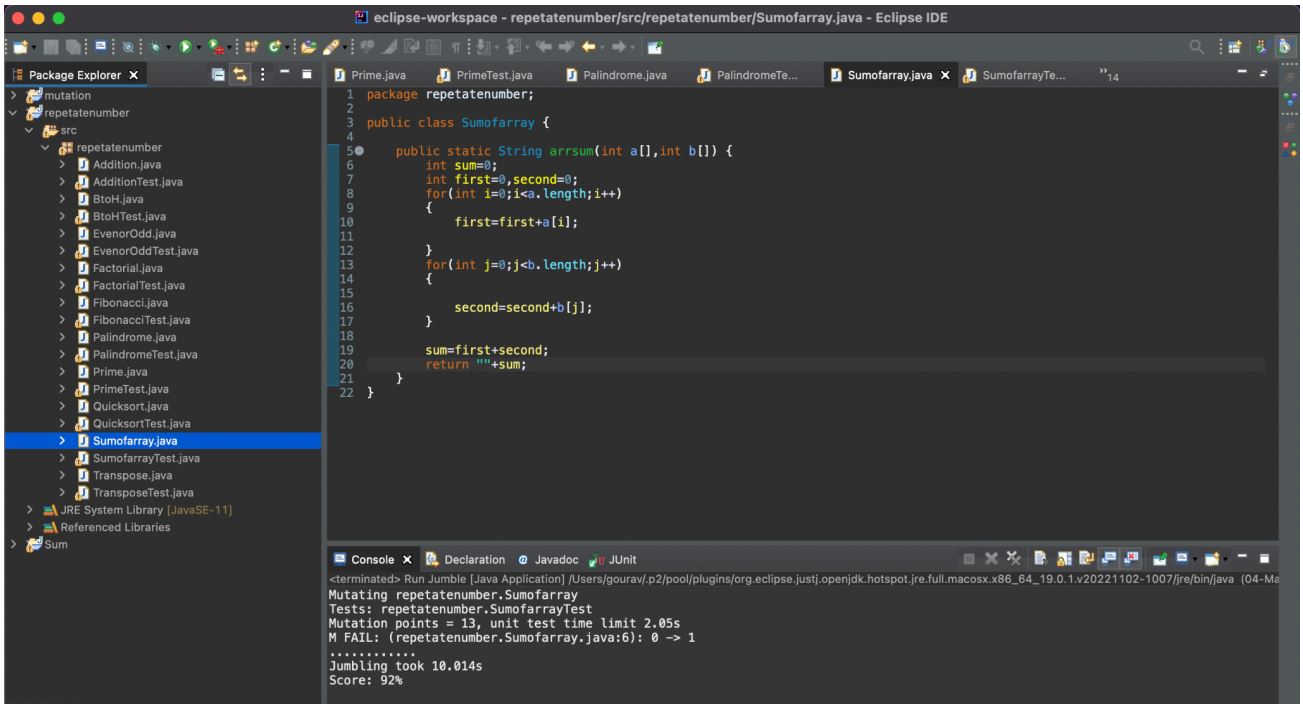
Q.7 Write a program to generate a palindrome of numbers.



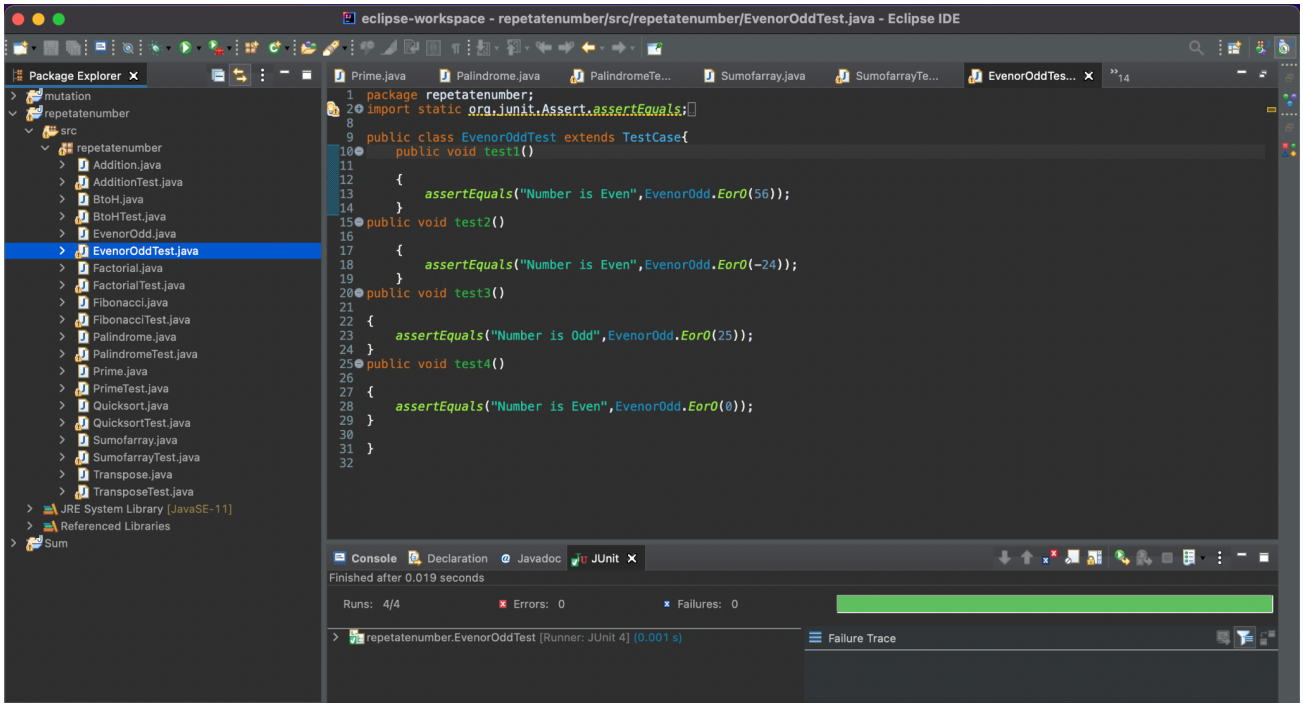


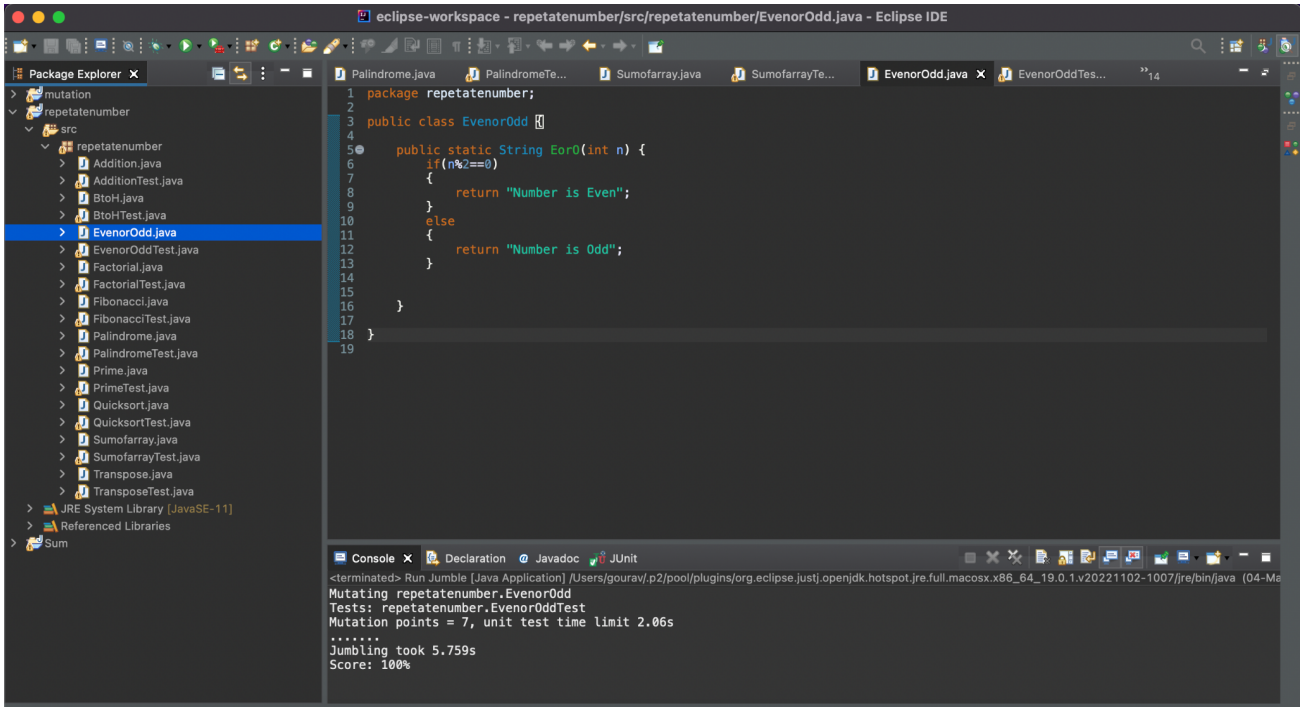
Q.8 Write a program to find out the sum of two arrays.





Q.9 Write a program to check whether the number is even or odd.





Q.10 Write a program for binary to hexadecimal conversion.