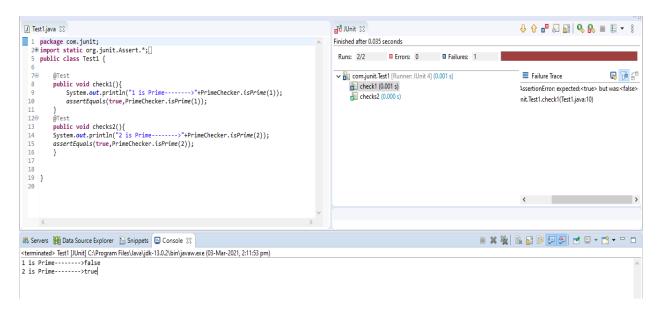
Accolite University Feb Batch 1 Junit, Mockito, Logging Assignment

Meet Shah(INT626)

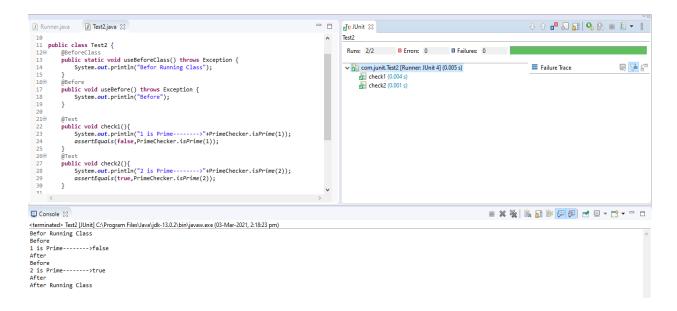
SCREENSHOTS

1. Junit on Prime Number Code

→ Running Test1 where there 1 failed assertion in check1() TestCase.



→ Running Test2 with Before, After, BeforeClass, AfterClass Annotations where there are no failures.

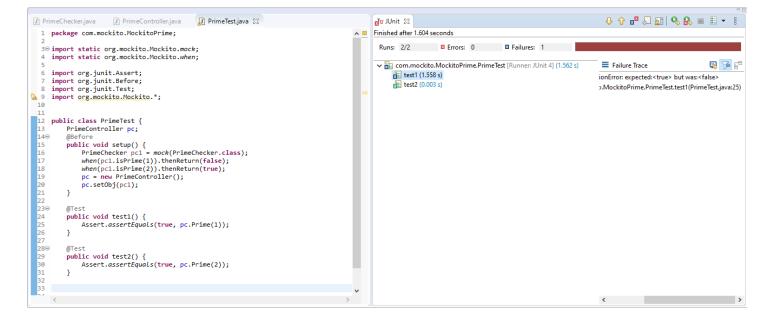


→ Implementing Test1 using Runner Class

```
☑ Runner.java ⋈
  package com.junit;
  3⊕ import org.junit.runner.JUnitCore;[.]
     public class Runner {
         public static void main(String[] args) {
  80
  9
               Result result = JUnitCore.runClasses(Test1.class);
 10
               for (Failure failure : result.getFailures()) {
 11
 12
                   System.out.println(failure.toString());
 13
 15
               System.out.println(result.wasSuccessful());
 16
 17
 18
■ Console ≅
<terminated> Runner [Java Application] C:\Program Files\Java\jdk-13.0.2\bin\javaw.exe (03-Mar-2021, 2:25:20 pm)
1 is Prime---->false
2 is Prime---->true
check1(com.junit.Test1): expected:<true> but was:<false>
false
```

2. Mockito on Prime Number Code

→ Failing Test1() as isPrime(1) returns false



→ No Failures as now for isPrime(1) we are asserting a false

```
☑ PrimeChecker.java
☑ PrimeController.java
☑ PrimeTest.java
                                                                                                                          <sub>e</sub>√u JUnit ⊠
                                                                                                                         Finished after 1.463 seconds
      import static org.mockito.Mockito.when;
      import org.junit.Assert;
      import org.junit.Before;
import org.junit.Test;

▼ ☐ com.mockito.MockitoPrime.PrimeTest [Runner: JUnit 4] (1.349 s)

                                                                                                                                                                                                                                                  5 7 F
                                                                                                                                                                                                           Failure Trace
      import org.mockito.Mockito.*;
                                                                                                                                 test2 (0.003 s)
      public class PrimeTest {
            PrimeController pc;
           gertore
public void setup() {
   PrimeChecker pc1 = mock(PrimeChecker.class);
   when(pc1.isPrime(1)).thenReturn(false);
   when(pc1.isPrime(2)).thenReturn(true);
 19
20
21
                 pc = new PrimeController();
                 pc.setObj(pc1);
           public void test1() {
    Assert.assertEquals(false, pc.Prime(1));
27
28⊖
 29
30
31
           public void test2() {
    Assert.assertEquals(true, pc.Prime(2));
 32
33
34
35 }
```

3. Logging on Prime Number Code

```
🔝 PrimeChecker.java 🔀
                                                                                                                                                                                                                                                                                                                          ■ Console ※
                                                                                                                                                                                                                                                                                                                       1 package com.logging.LoggingPrime;

1 package com.logging.LoggingPrime;
2 import java.io.File;

                 public class PrimeChecker {
                               static Logger log = LogManager.getLogger(PrimeChecker.class);
     11
                              public static void main(String[] args) {
    log.info("This is a function which checks if number is Prime or Not for 1 to
                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                     | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 7 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 9 is Prime | Talse | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 9 is Prime | Talse | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 10 is Prime | Talse | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 11 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 12 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 12 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 14 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 14 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 15 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 16 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 17 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 18 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 19 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 19 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 20 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 20 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 21 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 22 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 22 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 24 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 24 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 24 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 24 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 24 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 25 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecker:23 - 27 is Prime | True | 2021-03-03 15:35:17 | main | DEBUG PrimeChecke
                                            for(int i = -1 ; i <=101 ; i++){
     16
                                                         log.fatal("you cannot input negative number");
else if (i==0)
    log.warn("0 is neither prime nor composite");
                                                         else if(i>100)
     20
                                                                      Log.error("Number is greater than 100");
     21
22
                                                        else
    log.debug(i+" is Prime ------> "+isPrime(i));
     23
24
25
                               public static boolean isPrime(int n) {
     26€
                                           if (n <= 1)
    return false;
if (n <= 3)</pre>
     27
28
29
30
31
32
                                          return true;
if (n % 2 == 0 || n % 3 == 0)
return false;
                                           return false;

for (int i = 5; i * i <= n; i = i + 6)

if (n % i == 0 || n % (i + 2) == 0)

return false;
                                           return true;
```

```
2021-03-03 15:39:41 [main] INFO PrimeChecker:13 - This is a function which checks if number is Prime or Not for 1 to 100
2021-03-03 15:39:41 [main] FATAL PrimeChecker:17 - you cannot input negative number
2021-03-03 15:39:41 [main] WARN PrimeChecker:19 - 0 is neither prime nor composite
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 1 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 2 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 3 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 4 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 5 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 6 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 7 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 8 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 9 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 10 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 11 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 12 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 13 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 14 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 15 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 16 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 17 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 18 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 19 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 20 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 21 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 22 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 23 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 24 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 25 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 26 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 27 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 28 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 29 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 30 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 31 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 32 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 33 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 34 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 35 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 70 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 71 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 72 is Prime ------> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 73 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 74 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 75 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 76 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 77 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 78 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 79 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 80 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 81 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 82 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 83 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 84 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 85 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 86 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 87 is Prime ------> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 88 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 89 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 90 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 91 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 92 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 93 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 94 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 95 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 96 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 97 is Prime -----> true
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 98 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 99 is Prime -----> false
2021-03-03 15:39:41 [main] DEBUG PrimeChecker:23 - 100 is Prime -----> false 2021-03-03 15:39:41 [main] ERROR PrimeChecker:21 - Number is greater than 100
```