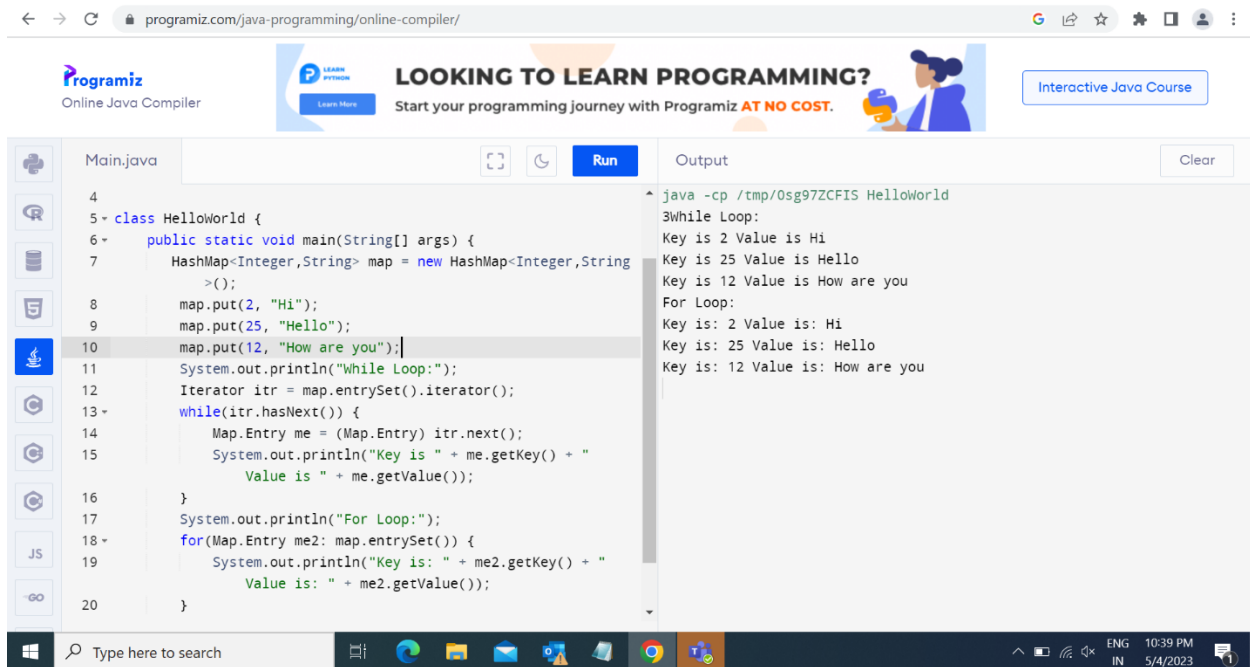


JAVA PROGRAMMING PRACTICE

Iterating on a hashmap using while loop and for-each loop



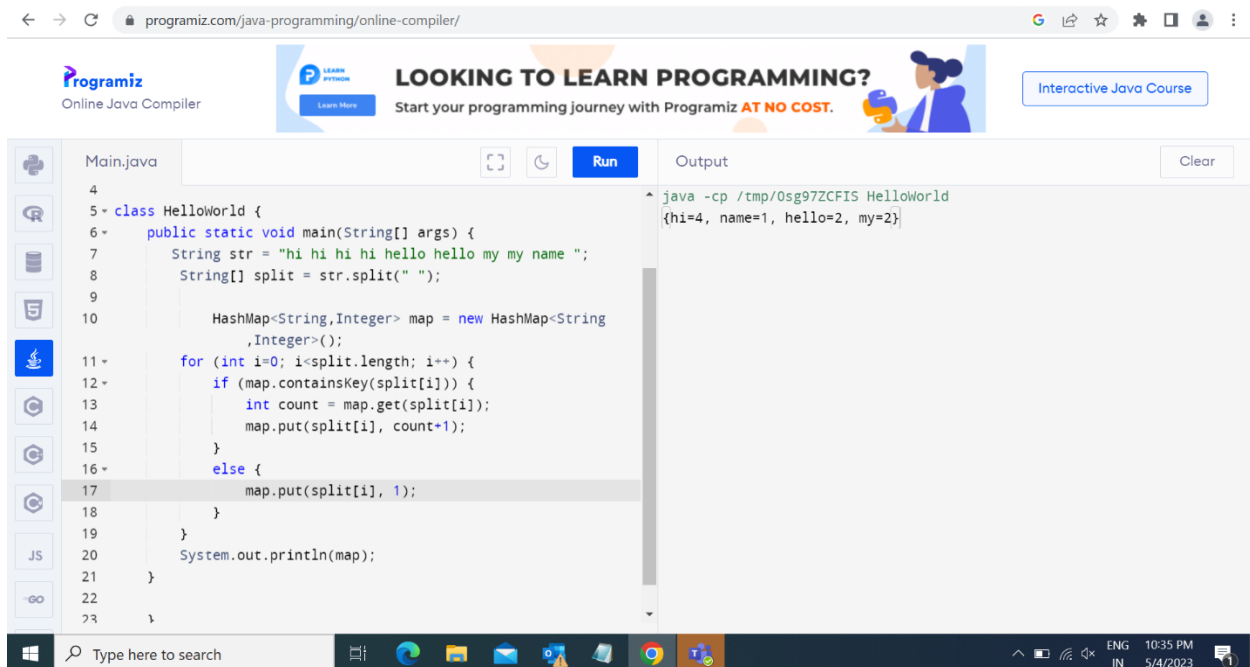
The screenshot shows the Programiz Online Java Compiler interface. The code in Main.java is as follows:

```
4 class HelloWorld {
5     public static void main(String[] args) {
6         HashMap<Integer,String> map = new HashMap<Integer,String>
7             >();
8         map.put(2, "Hi");
9         map.put(25, "Hello");
10        map.put(12, "How are you");
11        System.out.println("While Loop:");
12        Iterator itr = map.entrySet().iterator();
13        while(itr.hasNext()) {
14            Map.Entry me = (Map.Entry) itr.next();
15            System.out.println("Key is " + me.getKey() + "
16                Value is " + me.getValue());
17        }
18        System.out.println("For Loop:");
19        for(Map.Entry me2: map.entrySet()) {
20            System.out.println("Key is: " + me2.getKey() + "
21                Value is: " + me2.getValue());
22        }
23    }
24 }
```

The output of the program is:

```
java -cp /tmp/0sg97ZCFIS HelloWorld
While Loop:
Key is 2 Value is Hi
Key is 25 Value is Hello
Key is 12 Value is How are you
For Loop:
Key is: 2 Value is: Hi
Key is: 25 Value is: Hello
Key is: 12 Value is: How are you
```

Print the occurrence of a words in a sentence



The screenshot shows the Programiz Online Java Compiler interface. The code in Main.java is as follows:

```
4 class HelloWorld {
5     public static void main(String[] args) {
6         String str = "hi hi hi hi hello my my name ";
7         String[] split = str.split(" ");
8
9         HashMap<String,Integer> map = new HashMap<String
10             ,Integer>();
11         for (int i=0; i<split.length; i++) {
12             if (map.containsKey(split[i])) {
13                 int count = map.get(split[i]);
14                 map.put(split[i], count+1);
15             }
16             else {
17                 map.put(split[i], 1);
18             }
19         }
20         System.out.println(map);
21     }
22 }
23 }
```

The output of the program is:

```
java -cp /tmp/0sg97ZCFIS HelloWorld
{hi=4, name=1, hello=2, my=2}
```

Reverse a string

The screenshot shows the Programiz Online Java Compiler interface. The browser address bar displays `programiz.com/java-programming/online-compiler/`. The page header includes the Programiz logo, a banner for "LOOKING TO LEARN PROGRAMMING?" with a "Learn More" button, and a button for "Interactive Java Course".

The main editor area is titled "Main.java" and contains the following Java code:

```
1 // Online Java Compiler
2 // Use this editor to write, compile and run your Java code
  online
3
4 class HelloWorld {
5     public static void main(String[] args) {
6         System.out.println("Reverse a String Without using reverse
          ()"+"\\n");
7         String s="My name is manu";
8         for(int i=s.length()-1;i>=0;i--){
9             System.out.print(s.charAt(i));
10        }
11    }
12 }
```

The "Run" button is highlighted. The "Output" panel on the right shows the execution results:

```
java -cp /tmp/0sg97ZCFIS HelloWorld
Reverse a String Without using reverse()
unam si eman yM
```

The bottom of the image shows a Windows taskbar with a search bar and various application icons.

Swap two numbers

The screenshot shows the Programiz Online Java Compiler interface. The browser address bar displays `programiz.com/java-programming/online-compiler/`. The page header includes the Programiz logo, a banner for "LOOKING TO LEARN PROGRAMMING?" with a "Learn More" button, and a button for "Interactive Java Course".

The main editor area is titled "Main.java" and contains the following Java code:

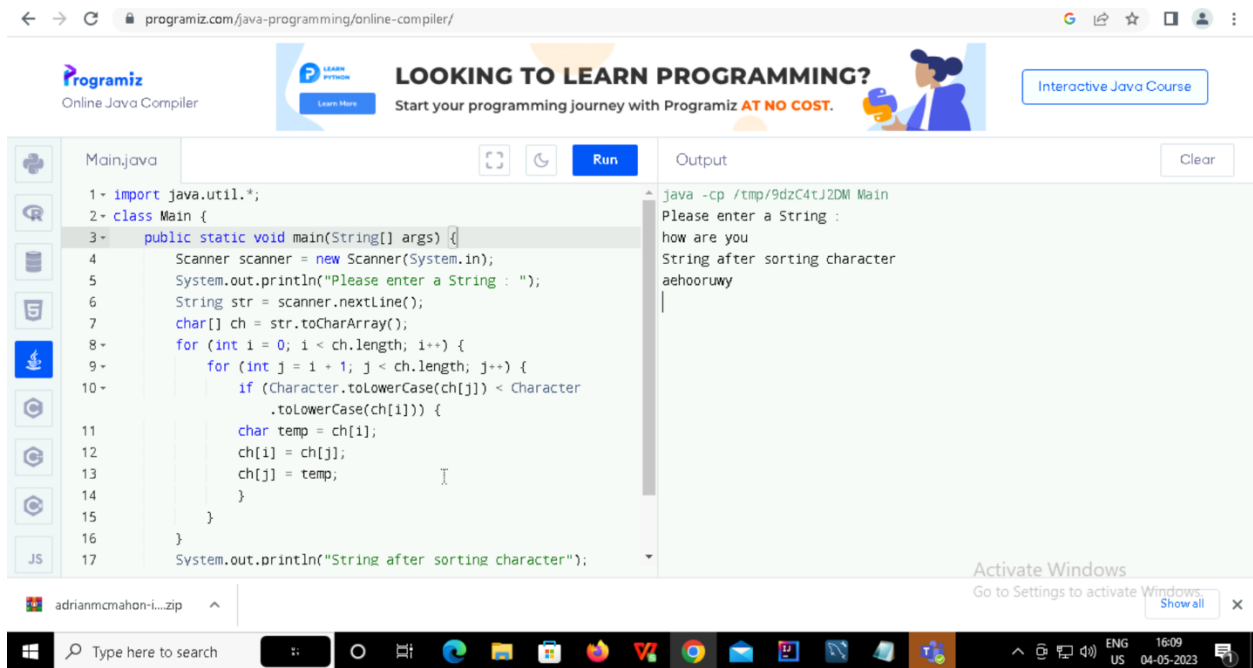
```
1 // Online Java Compiler
2 // Use this editor to write, compile and run your Java code
  online
3
4 class HelloWorld {
5     public static void main(String[] args) {
6         System.out.println("Swap two numbers"+"\\n");
7
8         int n = 2, m=6;
9         System.out.println("Before swapping "+n+" , "+m);
10        int temp=n;
11        n=m;
12        m=temp;
13        System.out.print("After Swapping " +n+" , " +m);
14        // for(int i=s.length()-1;i>=0;i--){
15        //     System.out.print(s.charAt(i));
16        // }
17    }
18 }
```

The "Run" button is highlighted. The "Output" panel on the right shows the execution results:

```
java -cp /tmp/0sg97ZCFIS HelloWorld
Swap two numbers
Before swapping 2 , 6
After Swapping 6 , 2
```

The bottom of the image shows a Windows taskbar with a search bar and various application icons.

Sorting of the characters in ascending order

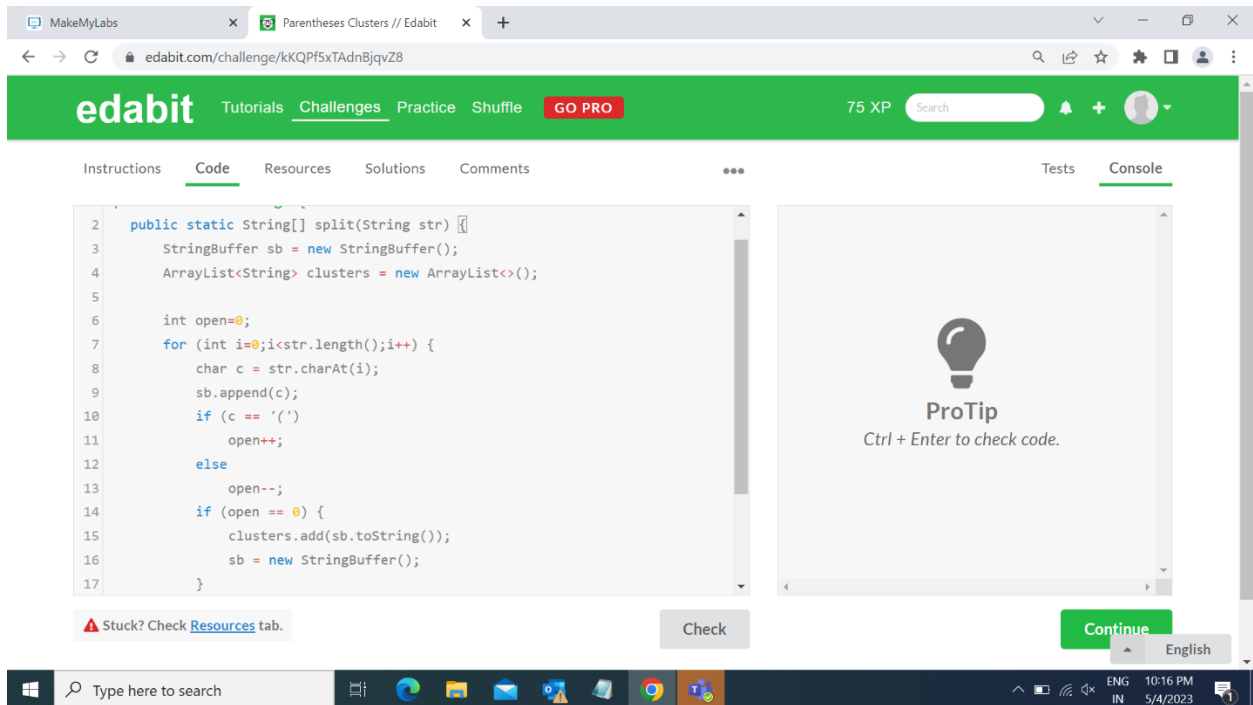


The screenshot shows the Programiz Online Java Compiler interface. The code editor contains a Java program that sorts the characters of a string in ascending order. The program uses a Scanner to take input, converts it to a character array, and then uses a nested loop with a swap operation to sort the characters. The output shows the sorted string.

```
1- import java.util.*;
2- class Main {
3-     public static void main(String[] args) {
4-         Scanner scanner = new Scanner(System.in);
5-         System.out.println("Please enter a String : ");
6-         String str = scanner.nextLine();
7-         char[] ch = str.toCharArray();
8-         for (int i = 0; i < ch.length; i++) {
9-             for (int j = i + 1; j < ch.length; j++) {
10-                 if (Character.toLowerCase(ch[j]) < Character
                    .toLowerCase(ch[i])) {
11-                     char temp = ch[i];
12-                     ch[i] = ch[j];
13-                     ch[j] = temp;
14-                 }
15-             }
16-         }
17-         System.out.println("String after sorting character");
18-     }
19- }
```

Output:

```
java -cp /tmp/9dzC4tJ2DM Main
Please enter a String :
how are you
String after sorting character
aeuhooruyw
```



The screenshot shows the Edabit challenge page for 'Parentheses Clusters'. The code editor contains a Java program that splits a string into clusters of balanced parentheses. The program uses a stack to track the opening and closing parentheses. The output shows the clusters of balanced parentheses.

```
2- public static String[] split(String str) {
3-     StringBuffer sb = new StringBuffer();
4-     ArrayList<String> clusters = new ArrayList<>();
5-
6-     int open=0;
7-     for (int i=0;i<str.length();i++) {
8-         char c = str.charAt(i);
9-         sb.append(c);
10-        if (c == '(')
11-            open++;
12-        else
13-            open--;
14-        if (open == 0) {
15-            clusters.add(sb.toString());
16-            sb = new StringBuffer();
17-        }
18-    }
19- }
```

ProTip: Ctrl + Enter to check code.

Calculator

MakeMyLabs Basic Arithmetic Operations // Ed

edabit.com/challenge/eHA9jMjzADDo6PhuJ

Instructions Code Resources Solutions Comments Tests Console

```
7 else if(op.equals("subtract")){
8     int s = Integer.parseInt(a)-Integer.parseInt(b);
9     return s;
10 }
11 else if(op.equals("divide")){
12     if(b=="0"){
13         return -2147483648;
14     }
15     int s = Integer.parseInt(a)/Integer.parseInt(b);
16     return s;
17 }
18 else if(op.equals("multiply")){
19     int s = Integer.parseInt(a)*Integer.parseInt(b);
20     return s;
21 }
22 else{
```

test01(BasicOperationTest)
✓ Test Passed
test02(BasicOperationTest)
✓ Test Passed
test03(BasicOperationTest)
✓ Test Passed
test04(BasicOperationTest)
✓ Test Passed
test05(BasicOperationTest)
✓ Test Passed
test06(BasicOperationTest)
✓ Test Passed
test07(BasicOperationTest)
✓ Test Passed
test08(BasicOperationTest)
✓ Test Passed

Stuck? Check [Resources](#) tab. SUBMIT FINAL Skip

© 2021 Edabit Inc. Terms Privacy Roadmap Affiliates Help

MakeMyLabs Basic Arithmetic Operations // Ed

edabit.com/challenge/eHA9jMjzADDo6PhuJ

Instructions Code Resources Solutions Comments Tests Console

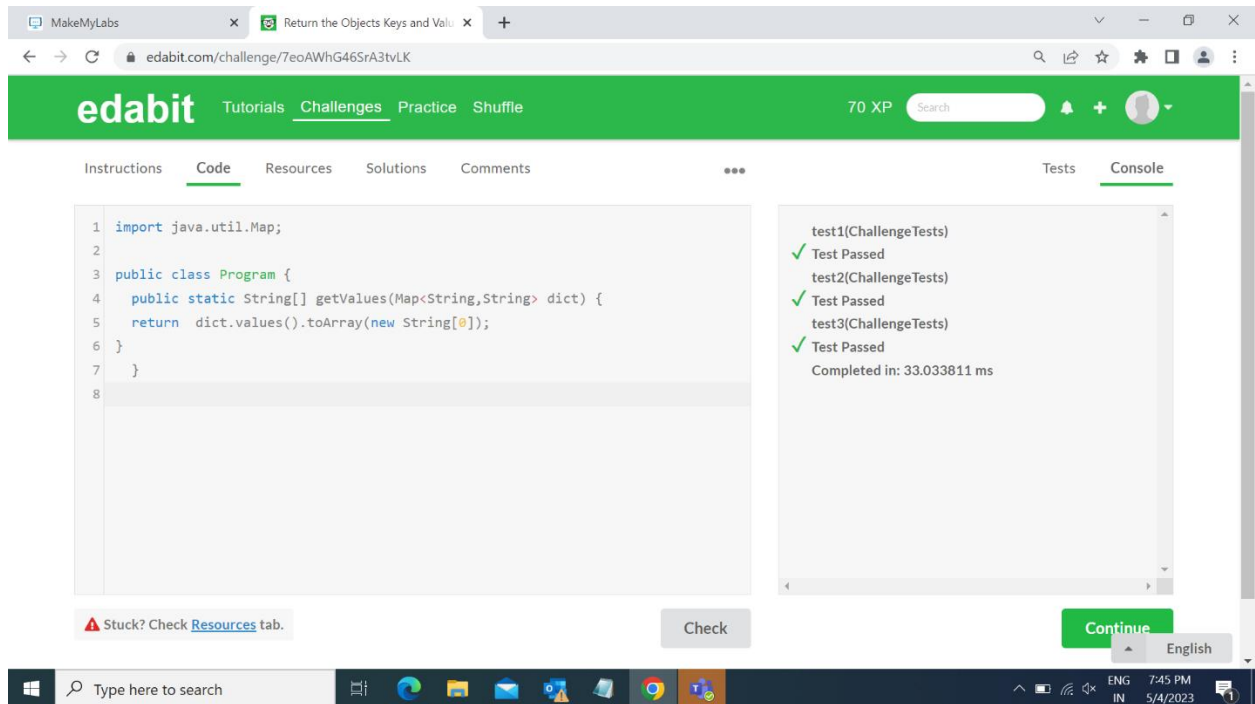
```
4 int s = Integer.parseInt(a)+Integer.parseInt(b);
5 return s;
6 }
7 else if(op.equals("subtract")){
8     int s = Integer.parseInt(a)-Integer.parseInt(b);
9     return s;
10 }
11 else if(op.equals("divide")){
12     if(b=="0"){
13         return -2147483648;
14     }
15     int s = Integer.parseInt(a)/Integer.parseInt(b);
16     return s;
17 }
18 else if(op.equals("multiply")){
19     int s = Integer.parseInt(a)+Integer.parseInt(b);
20     return s;
21 }
22 else{
```

test06(BasicOperationTest)
✓ Test Passed
test07(BasicOperationTest)
✓ Test Passed
test08(BasicOperationTest)
✓ Test Passed
test09(BasicOperationTest)
✓ Test Passed
test10(BasicOperationTest)
✓ Test Passed
test11(BasicOperationTest)
✓ Test Passed
test12(BasicOperationTest)
✓ Test Passed
Completed in: 53.7593 ms

Stuck? Check [Resources](#) tab. Check Skip

© 2021 Edabit, Inc. Terms Privacy Roadmap Affiliates Help

Print the values from a Map



MakeMyLabs x Return the Objects Keys and Values x +

edabit.com/challenge/7eoAWHg46SrA3tvLK

edabit Tutorials Challenges Practice Shuffle 70 XP Search

Instructions Code Resources Solutions Comments Tests Console

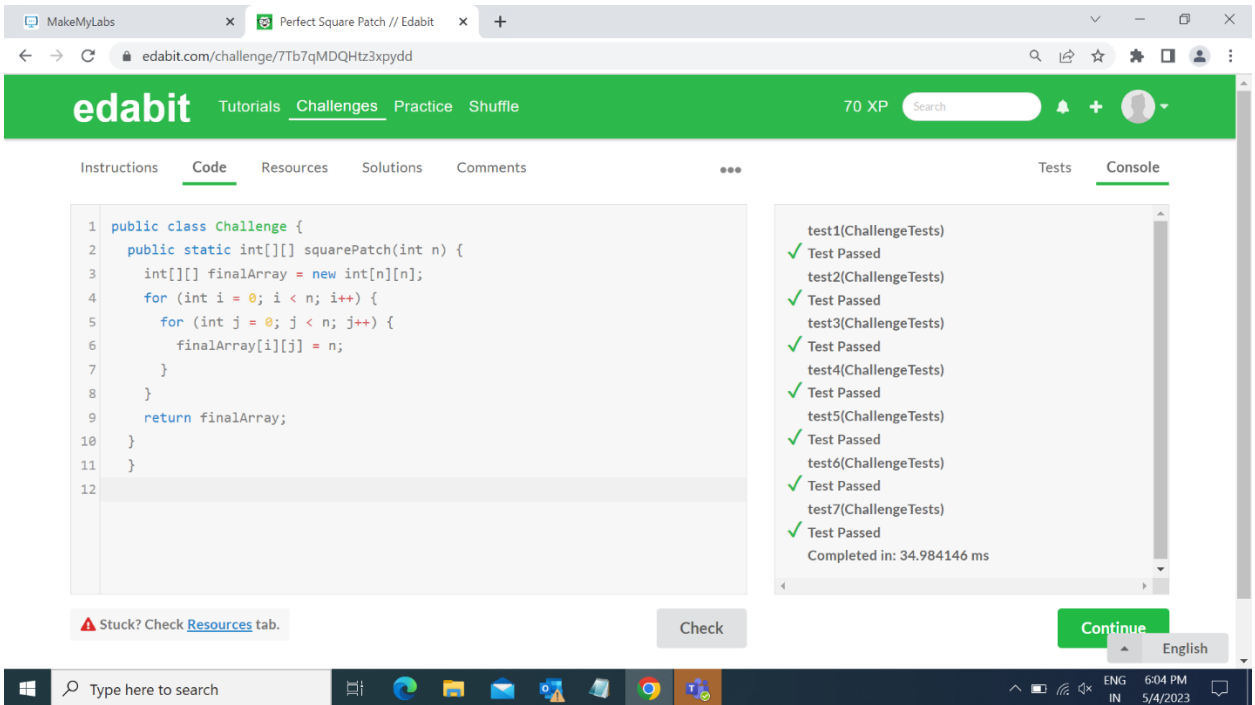
```
1 import java.util.Map;
2
3 public class Program {
4     public static String[] getValues(Map<String,String> dict) {
5         return dict.values().toArray(new String[0]);
6     }
7 }
8
```

test1(ChallengeTests)
✓ Test Passed
test2(ChallengeTests)
✓ Test Passed
test3(ChallengeTests)
✓ Test Passed
Completed in: 33.033811 ms

Stuck? Check Resources tab. Check Continue English

Type here to search

7:45 PM 5/4/2023



MakeMyLabs x Perfect Square Patch // Edabit x +

edabit.com/challenge/7Tb7qMDQHz3xpydd

edabit Tutorials Challenges Practice Shuffle 70 XP Search

Instructions Code Resources Solutions Comments Tests Console

```
1 public class Challenge {
2     public static int[][] squarePatch(int n) {
3         int[][] finalArray = new int[n][n];
4         for (int i = 0; i < n; i++) {
5             for (int j = 0; j < n; j++) {
6                 finalArray[i][j] = n;
7             }
8         }
9         return finalArray;
10    }
11 }
12
```


test1(ChallengeTests)
✓ Test Passed
test2(ChallengeTests)
✓ Test Passed
test3(ChallengeTests)
✓ Test Passed
test4(ChallengeTests)
✓ Test Passed
test5(ChallengeTests)
✓ Test Passed
test6(ChallengeTests)
✓ Test Passed
test7(ChallengeTests)
✓ Test Passed
Completed in: 34.984146 ms



Stuck? Check Resources tab. Check Continue English

Type here to search

6:04 PM 5/4/2023

Delete a character from a string

 **Programiz**
Online Java Compiler

  Lenovo IdeaPad Slim 3 Intel Core i5 11th Gen 15.6" ...
\$53,022.00 **prime**
Save \$2,000 with coupon

[Interactive Java Course](#)

Main.java

```
4
5- public class PrimeFactors {
6- public static void main(String[] args) {
7- Scanner sc = new Scanner(System.in);
8- System.out.println("Enter the string : ");
9- String s = sc.nextLine();
10- int count=0;
11- System.out.println("Enter the character : ");
12- char ch=sc.next().charAt(0);
13- for(int i=0;i<s.length();i++){
14- if(s.charAt(i)==ch){
15- // System.out.println(ch+" "+s.charAt(i));
16- count++;
17- }
18- }
19- System.out.print(s.charAt(i));
20- }
21- }
```

Run

Output


Clear

java -cp /tmp/9dzC4tJ2DM PrimeFactors
Enter the string :
mynameisaysha
Enter the character :
a
mynameisysh


adrianmcmahon-i...zip


Activate Windows
Go to Settings to activate Windows.
[Show all](#)

Type here to search

 ENG 16:05 04-05-2023

Prime numbers to a user inputted limit

 **Programiz**
Online Java Compiler

 Lenovo IdeaPad Slim 3 Intel Core i5 11th Gen 15.6" ...
\$53,022.00 **prime**
Save \$2,000 with coupon

[Interactive Java Course](#)

Main.java

```
4
5- public class PrimeFactors {
6- public static void main(String[] args) {
7-
8- ArrayList<Integer> primes = new ArrayList<Integer>();
9- for (int i = 2; i <= 18; i++) {
10- if (isPrime(i)) {
11- primes.add(i);
12- }
13- }
14- System.out.println("Prime numbers ");
15- System.out.println(primes);
16- }
17-
18- public static boolean isPrime(int number) {
19- if (number < 2) {
20- return false;
21- }
22- }
```

Run

Output


Clear

java -cp /tmp/0oBcCR81Qq PrimeFactors
Prime numbers [2, 3, 5, 7, 11, 13, 17]


adrianmcmahon-i...zip


Activate Windows
Go to Settings to activate Windows.
[Show all](#)

Type here to search

 ENG 15:48 04-05-2023

Find the average of an elements in an array

 **Programiz**
Online Java Compiler

 **LOOKING TO LEARN PROGRAMMING?**
Start your programming journey with Programiz **AT NO COST.**

[Interactive Java Course](#)

Main.java

```
6 public static void main(String[] args) {
7     Scanner scanner = new Scanner(System.in);
8     List<Integer> factors = new ArrayList<>();
9     int avg=0,count=0;;
10    for (int i = 0; i < 5; i++) {
11        System.out.print("Enter a number : ");
12        int input = scanner.nextInt();
13        factors.add(input);
14    }
15
16    for(int a : factors){
17        count++;
18        avg=avg+a;
19    }
20    // System.out.println(count);
21    int s = avg/count;
22    System.out.println(s);
23 }
```

Run

Output


Clear

java -cp /tmp/0oBcCR8lQq PrimeFactors
Enter a number : 1
Enter a number : 2
Enter a number : 3
Enter a number : 4
Enter a number : 5
3

Activate Windows
Go to Settings to activate Windows.
[Show all](#)


adrianmcmahon-i...zip


Type here to search



ENG US 15:26 04-05-2023

Find the prime factors from a given integer

 **Programiz**
Online Java Compiler

 **LOOKING TO LEARN PROGRAMMING?**
Start your programming journey with Programiz **AT NO COST.**

[Interactive Java Course](#)

Main.java

```
6 public static void main(String[] args) {
7     Scanner scanner = new Scanner(System.in);
8     System.out.println("Enter the number : ");
9     int n = scanner.nextInt();
10    scanner.close();
11    List<Integer> factors = new ArrayList<>();
12    while (n % 2 == 0) {
13        factors.add(2);
14        n /= 2;
15    }
16    for (int i = 3; i <= Math.sqrt(n); i += 2) {
17        while (n % i == 0) {
18            factors.add(i);
19            n /= i;
20        }
21    }
22    if (n > 2) {
23        factors.add(n);
24    }
25 }
```

Run

Output


Clear

java -cp /tmp/0oBcCR8lQq PrimeFactors
Enter the number : 18
Prime factors of 1: [2, 3, 3]

Activate Windows
Go to Settings to activate Windows.
[Show all](#)

adrianmcmahon-i...zip

Type here to search



ENG US 15:07 04-05-2023

Input line number to the given sentence

HackerRank

Prepare > Java > Introduction > Java End-of-fileExit Full Screen View

Problem

"In computing, End Of File (commonly abbreviated EOF) is a condition in a computer operating system where no more data can be read from a data source." — (Wikipedia: End-of-file)

The challenge here is to read n lines of input until you reach EOF; then number and print all n lines of content.

Hint: Java's `Scanner.hasNext()` method is helpful for this problem.

Input Format

Read some unknown n lines of input from `stdin(System.in)` until you reach EOF; each line of input contains a non-empty String.

Output Format

```
8
9
10
11
12
13
14
15
16
17
public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    int lineNum = 0;
    while (scanner.hasNextLine()) {
        String line = scanner.nextLine();
        lineNum++;
        System.out.println(lineNum + " " + line);
    }
    scanner.close();
}
```

Line: 22 Col: 1

☐ Test against custom input

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

✓ Sample Test case 0

```
2 I am a file
3 Read me until end-of-file.
```

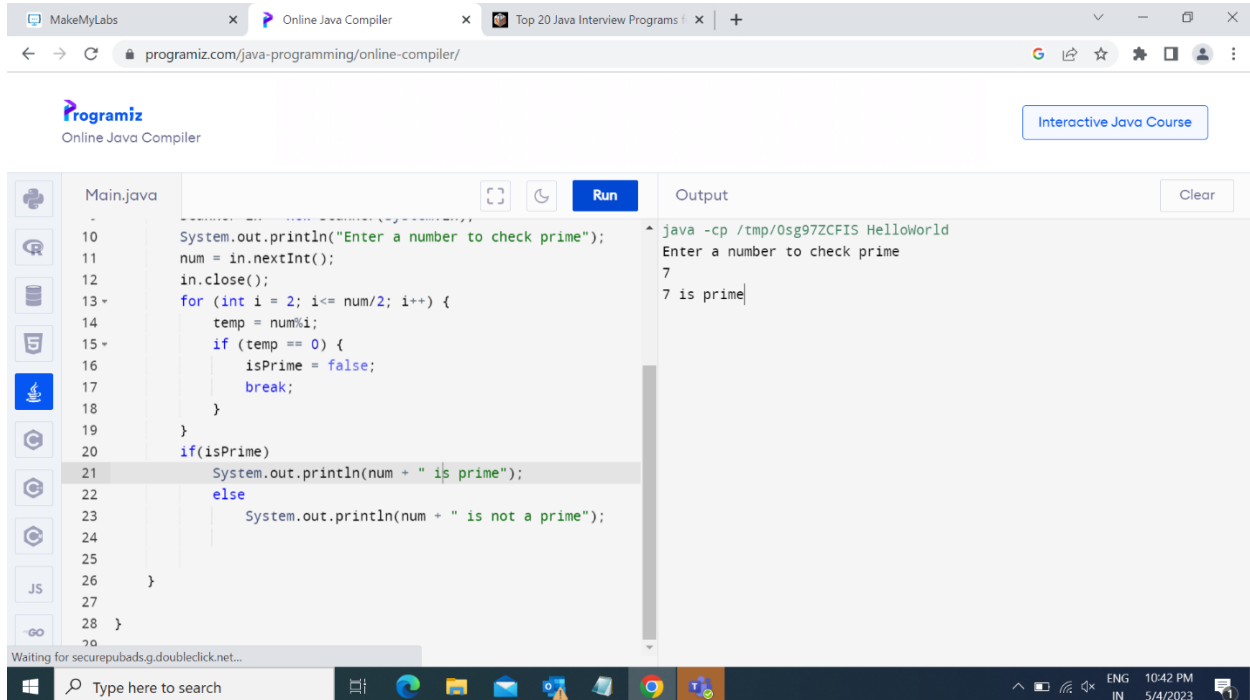
adrianmcmahon-i....zip

Activate Windows
Go to Settings to activate Windows.
[Show all](#)

Type here to search

ENG 12:53
US 04-05-2023

Check whether number is prime or not



The screenshot shows a web browser with the URL `programiz.com/java-programming/online-compiler/`. The page features the Programiz logo and an "Interactive Java Course" button. The main area displays a Java code editor with a file named `Main.java`. The code is as follows:

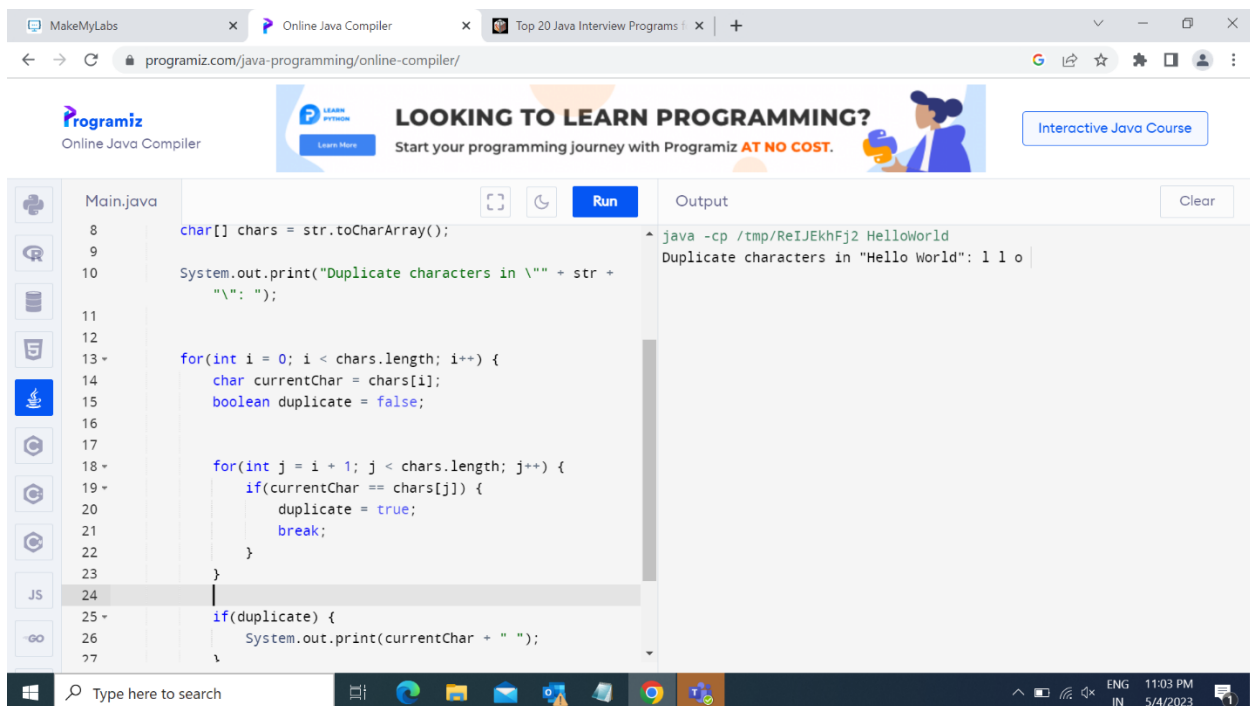
```
10 System.out.println("Enter a number to check prime");
11 num = in.nextInt();
12 in.close();
13 for (int i = 2; i <= num/2; i++) {
14     temp = num%i;
15     if (temp == 0) {
16         isPrime = false;
17         break;
18     }
19 }
20 if(isPrime)
21     System.out.println(num + " is prime");
22 else
23     System.out.println(num + " is not a prime");
24
25
26 }
27
28 }
```

The "Output" panel on the right shows the execution results:

```
java -cp /tmp/0sg97ZCFIS HelloWorld
Enter a number to check prime
7
7 is prime
```

The Windows taskbar at the bottom shows the time as 10:42 PM on 5/4/2023.

Print the duplicate letters in a string



The screenshot shows the same online Java compiler interface. A banner for "LOOKING TO LEARN PROGRAMMING?" is visible at the top. The code editor contains the following Java code:

```
8 char[] chars = str.toCharArray();
9
10 System.out.print("Duplicate characters in \"" + str +
11     "\"");
12
13 for(int i = 0; i < chars.length; i++) {
14     char currentChar = chars[i];
15     boolean duplicate = false;
16
17     for(int j = i + 1; j < chars.length; j++) {
18         if(currentChar == chars[j]) {
19             duplicate = true;
20             break;
21         }
22     }
23
24     if(duplicate) {
25         System.out.print(currentChar + " ");
26     }
27 }
```

The "Output" panel shows the result of running the code with the input string "Hello World":

```
java -cp /tmp/ReIJEkhFj2 HelloWorld
Duplicate characters in "Hello World": l l o
```

The Windows taskbar at the bottom shows the time as 11:03 PM on 5/4/2023.