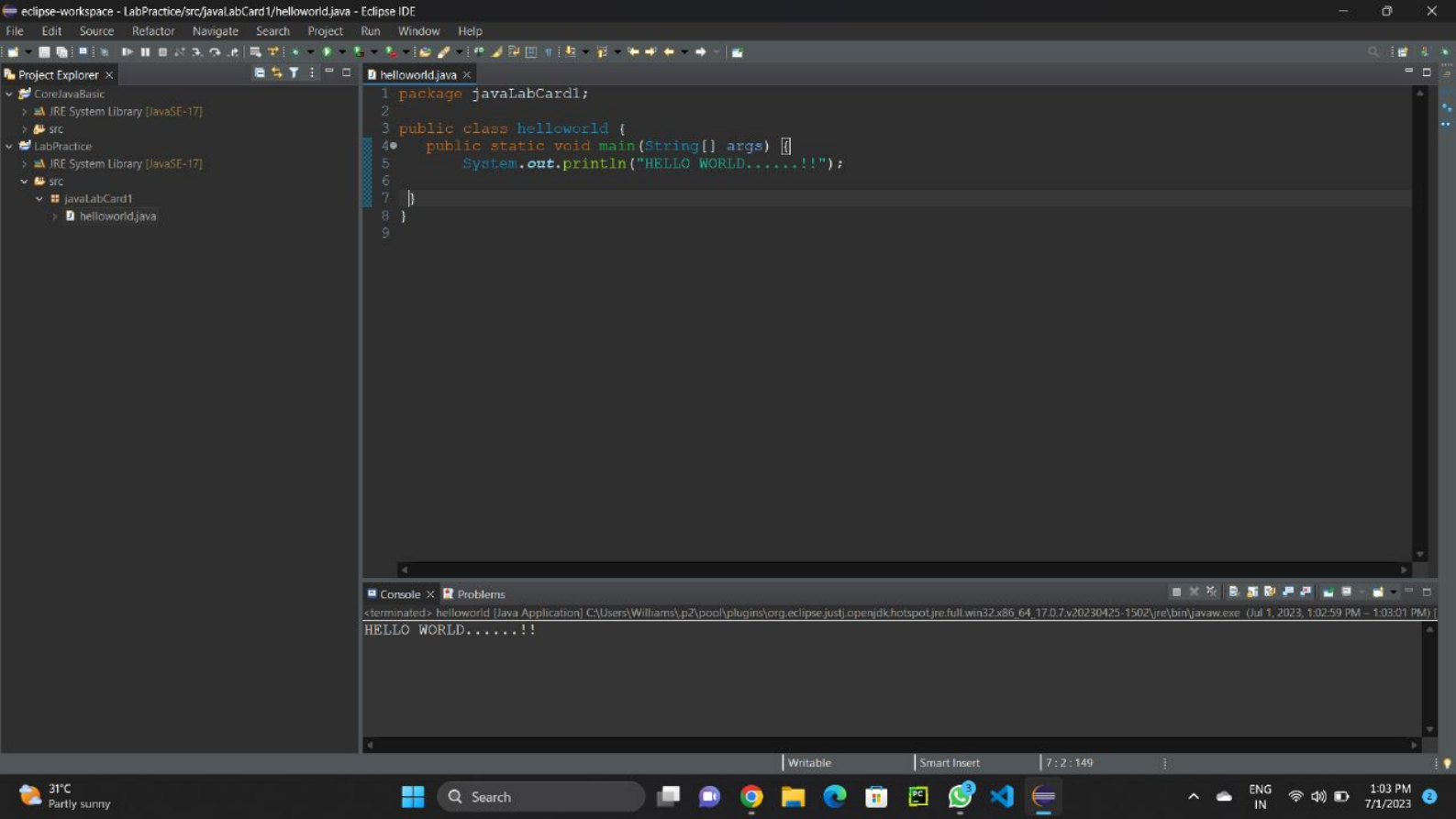
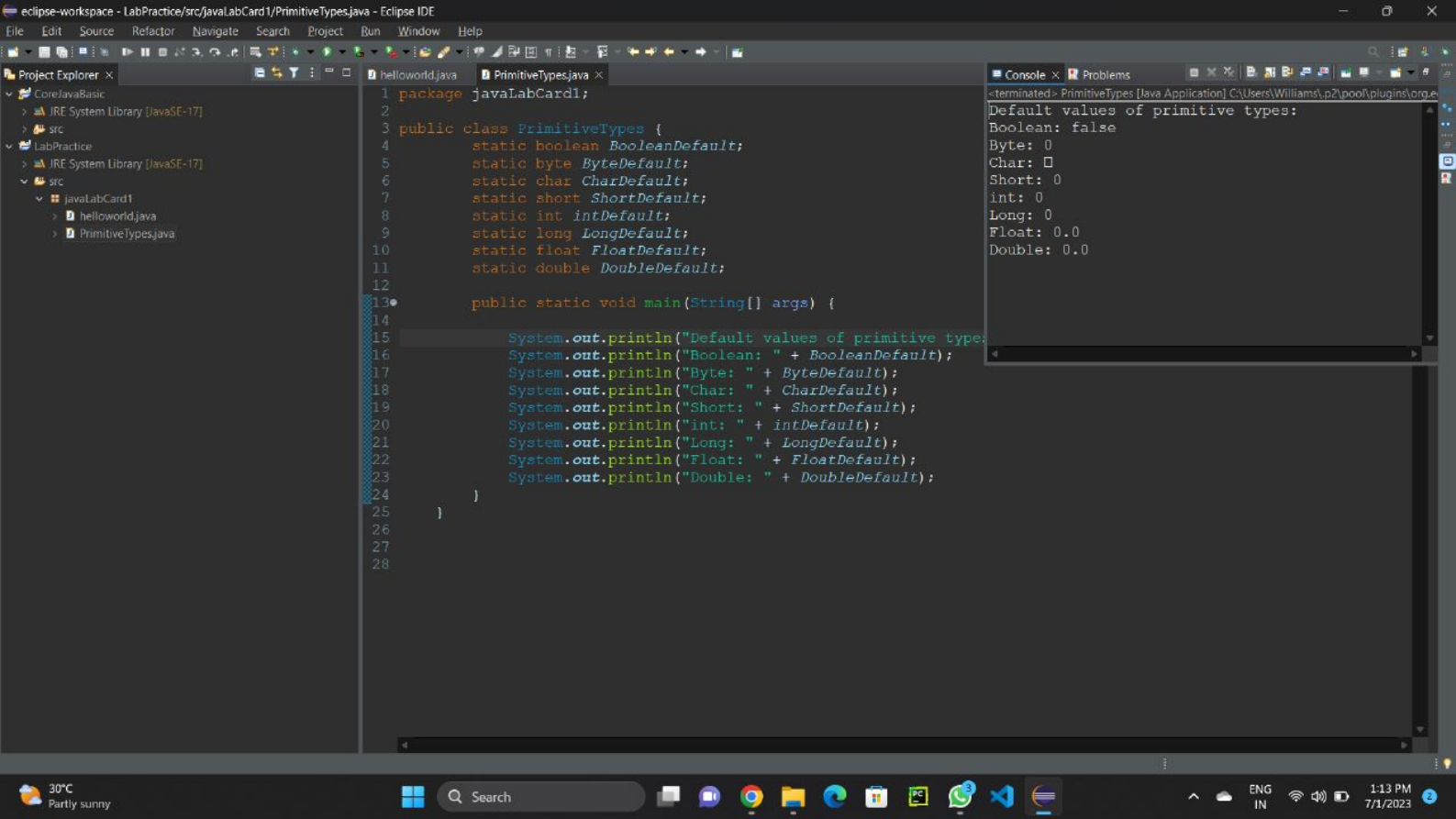
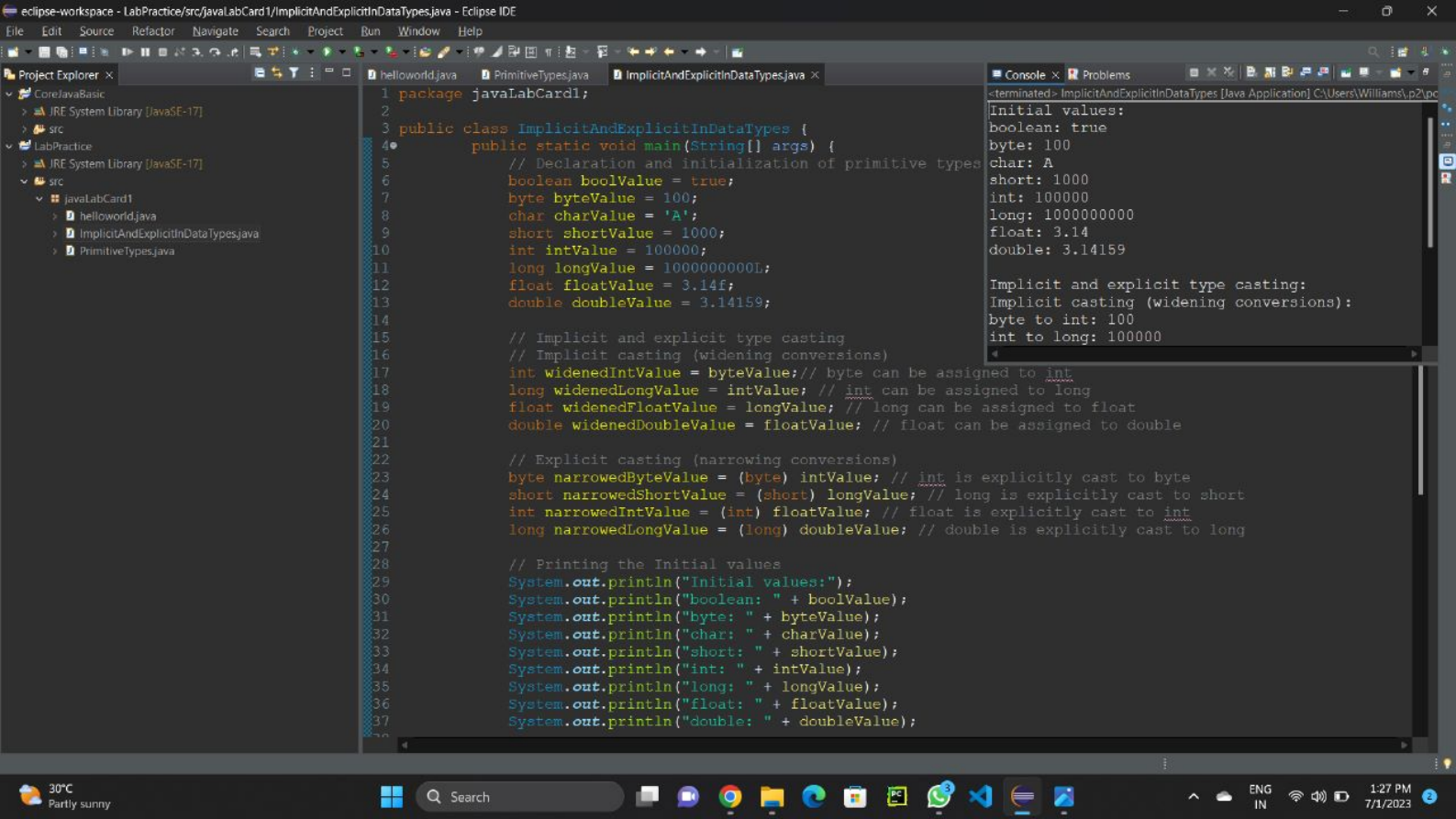
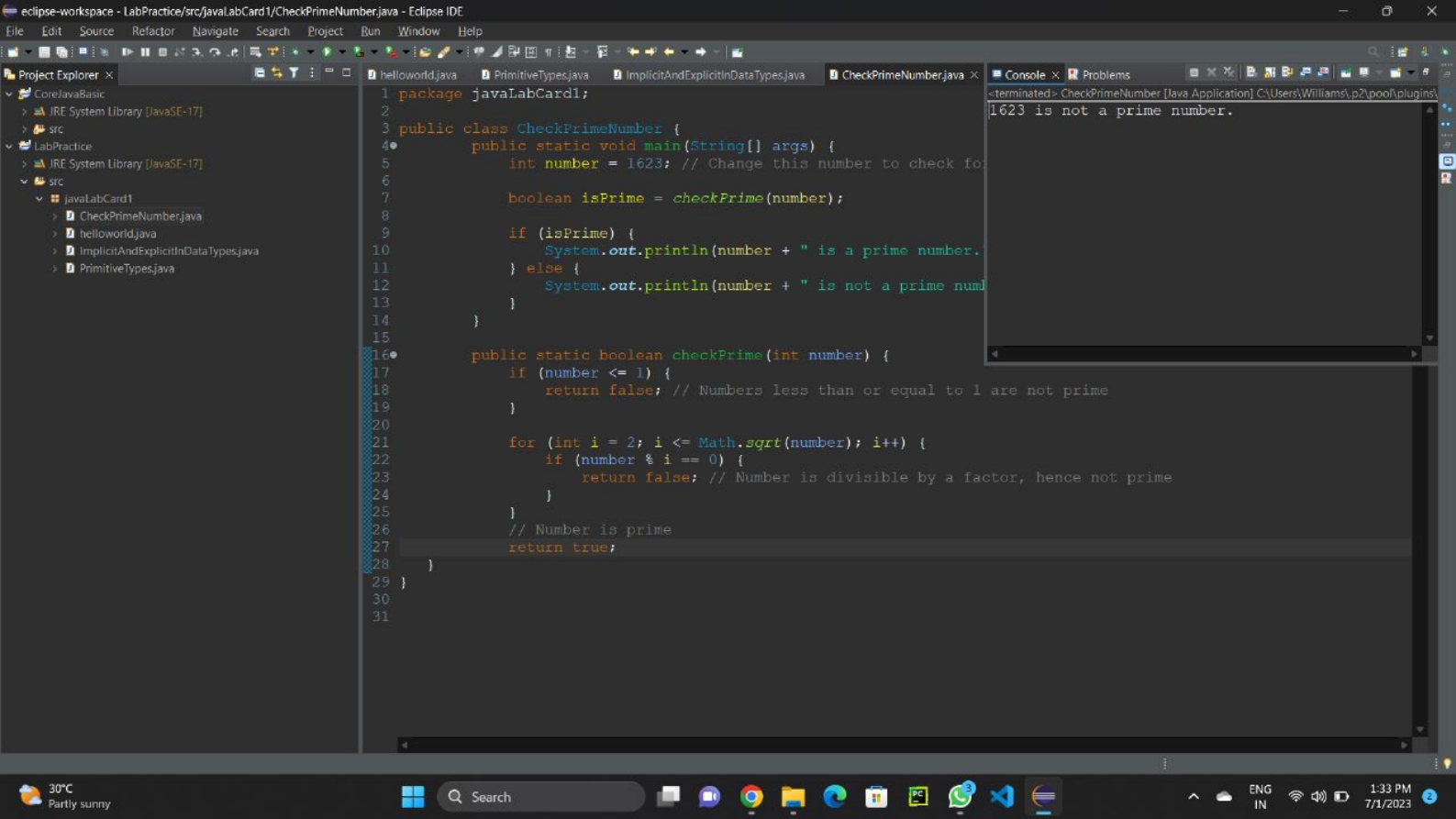
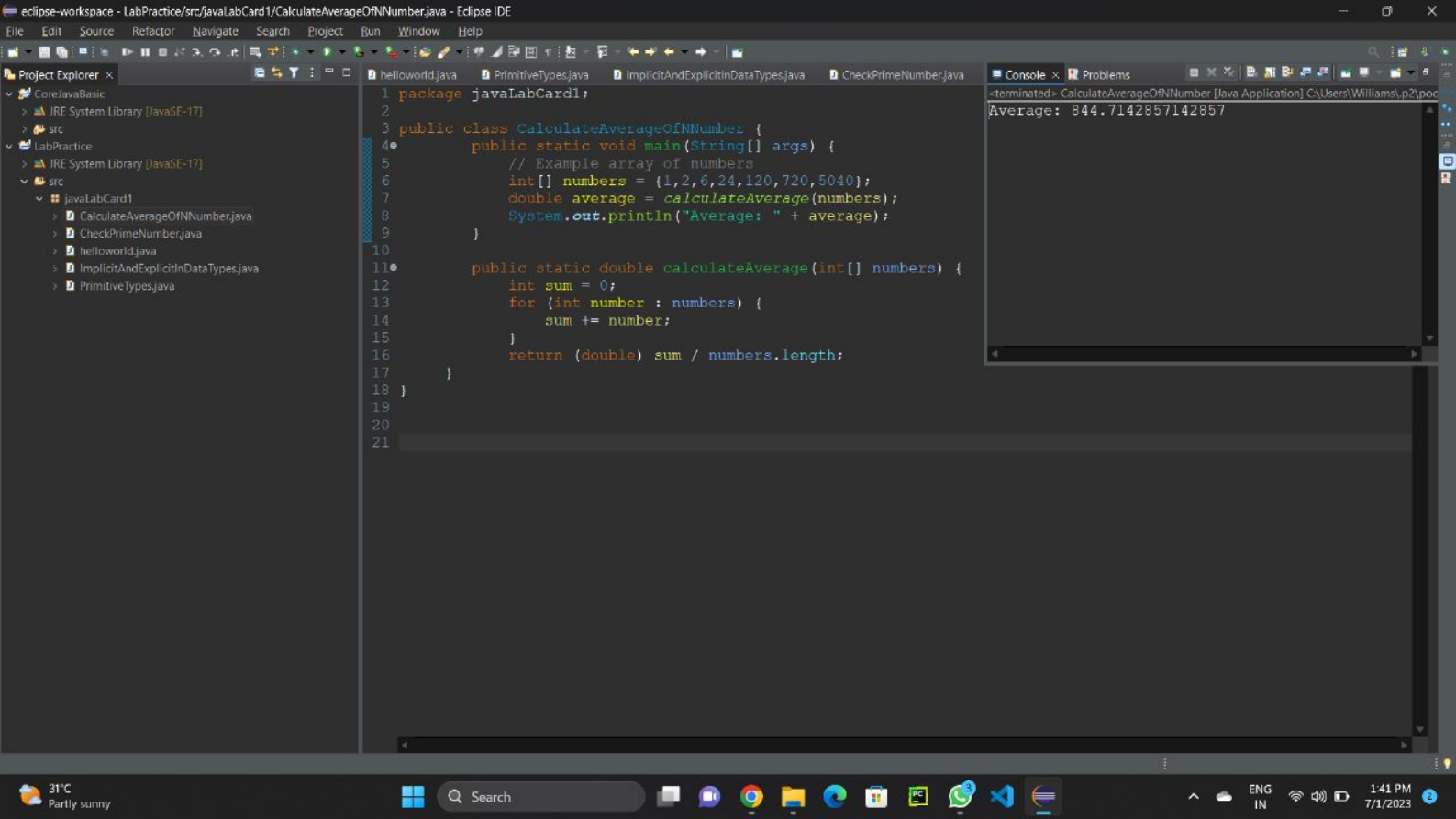

eclipse-workspace - LabPractice/src/javaLabCard1/helloworld.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
CoreJavaBasic
JRE System Library [JavaSE-17]
src
LabPractice
JRE System Library [JavaSE-17]
src
javaLabCard1
helloworld.java
helloworld.java
1 package javaLabCard1;
2
3 public class helloworld {
4 public static void main(String[] args) {
5 System.out.println("HELLO WORLD.....!!");
6
7 }
8 }
9
Console
Problems
<terminated> helloworld [Java Application] C:\Users\Williams\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.7.v20230425-1502\jre\bin\javaw.exe (Jul 1, 2023, 1:02:59 PM – 1:03:01 PM)
HELLO WORLD.....!!
Writable
Smart Insert
7 : 2 : 149
31°C
Partly sunny
Search
ENG
IN
1:03 PM
7/1/2023


eclipse-workspace - LabPractice/src/javaLabCard1/PrimitiveTypes.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
CoreJavaBasic
JRE System Library [JavaSE-17]
src
LabPractice
JRE System Library [JavaSE-17]
src
javaLabCard1
helloworld.java
PrimitiveTypes.java
helloworld.java
PrimitiveTypes.java
1 package javaLabCard1;
2
3 public class PrimitiveTypes {
4 static boolean BooleanDefault;
5 static byte ByteDefault;
6 static char CharDefault;
7 static short ShortDefault;
8 static int intDefault;
9 static long LongDefault;
10 static float FloatDefault;
11 static double DoubleDefault;
12
13 public static void main(String[] args) {
14
15 System.out.println("Default values of primitive type
16 System.out.println("Boolean: " + BooleanDefault);
17 System.out.println("Byte: " + ByteDefault);
18 System.out.println("Char: " + CharDefault);
19 System.out.println("Short: " + ShortDefault);
20 System.out.println("int: " + intDefault);
21 System.out.println("Long: " + LongDefault);
22 System.out.println("Float: " + FloatDefault);
23 System.out.println("Double: " + DoubleDefault);
24 }
25 }
26
27
28
Console
Problems
<terminated> PrimitiveTypes [Java Application] C:\Users\Williams\.p2\pool\plugins\org.e
Default values of primitive types:
Boolean: false
Byte: 0
Char:
Short: 0
int: 0
Long: 0
Float: 0.0
Double: 0.0
30°C
Partly sunny
Search
ENG
IN
1:13 PM
7/1/2023


eclipse-workspace - LabPractice/src/javaLabCard1/ImplicitAndExplicitInDataTypes.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
CoreJavaBasic
JRE System Library [JavaSE-17]
src
LabPractice
JRE System Library [JavaSE-17]
src
javaLabCard1
helloworld.java
ImplicitAndExplicitInDataTypes.java
PrimitiveTypes.java
helloworld.java
PrimitiveTypes.java
ImplicitAndExplicitInDataTypes.java
1 package javaLabCard1;
2
3 public class ImplicitAndExplicitInDataTypes {
4 public static void main(String[] args) {
5 // Declaration and initialization of primitive types
6 boolean boolValue = true;
7 byte byteValue = 100;
8 char charValue = 'A';
9 short shortValue = 1000;
10 int intValue = 100000;
11 long longValue = 1000000000L;
12 float floatValue = 3.14f;
13 double doubleValue = 3.14159;
14
15 // Implicit and explicit type casting
16 // Implicit casting (widening conversions)
17 int widenedIntValue = byteValue;// byte can be assigned to int
18 long widenedLongValue = intValue; // int can be assigned to long
19 float widenedFloatValue = longValue; // long can be assigned to float
20 double widenedDoubleValue = floatValue; // float can be assigned to double
21
22 // Explicit casting (narrowing conversions)
23 byte narrowedByteValue = (byte) intValue; // int is explicitly cast to byte
24 short narrowedShortValue = (short) longValue; // long is explicitly cast to short
25 int narrowedIntValue = (int) floatValue; // float is explicitly cast to int
26 long narrowedLongValue = (long) doubleValue; // double is explicitly cast to long
27
28 // Printing the Initial values
29 System.out.println("Initial values:");
30 System.out.println("boolean: " + boolValue);
31 System.out.println("byte: " + byteValue);
32 System.out.println("char: " + charValue);
33 System.out.println("short: " + shortValue);
34 System.out.println("int: " + intValue);
35 System.out.println("long: " + longValue);
36 System.out.println("float: " + floatValue);
37 System.out.println("double: " + doubleValue);
Console
Problems
<terminated> ImplicitAndExplicitInDataTypes [Java Application] C:\Users\Williams\.p2\pc
Initial values:
boolean: true
byte: 100
char: A
short: 1000
int: 100000
long: 1000000000
float: 3.14
double: 3.14159
Implicit and explicit type casting:
Implicit casting (widening conversions):
byte to int: 100
int to long: 100000
30°C
Partly sunny
Search
ENG
IN
1:27 PM
7/1/2023


eclipse-workspace - LabPractice/src/javaLabCard1/CheckPrimeNumber.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
CoreJavaBasic
JRE System Library [JavaSE-17]
src
LabPractice
JRE System Library [JavaSE-17]
src
javaLabCard1
CheckPrimeNumber.java
helloworld.java
ImplicitAndExplicitInDataTypes.java
PrimitiveTypes.java
helloworld.java
PrimitiveTypes.java
ImplicitAndExplicitInDataTypes.java
CheckPrimeNumber.java
1 package javaLabCard1;
2
3 public class CheckPrimeNumber {
4 public static void main(String[] args) {
5 int number = 1623; // Change this number to check fo
6
7 boolean isPrime = checkPrime(number);
8
9 if (isPrime) {
10 System.out.println(number + " is a prime number.
11 } else {
12 System.out.println(number + " is not a prime numl
13 }
14 }
15
16 public static boolean checkPrime(int number) {
17 if (number <= 1) {
18 return false; // Numbers less than or equal to 1 are not prime
19 }
20
21 for (int i = 2; i <= Math.sqrt(number); i++) {
22 if (number % i == 0) {
23 return false; // Number is divisible by a factor, hence not prime
24 }
25 }
26 // Number is prime
27 return true;
28 }
29 }
30
31
Console
Problems
<terminated> CheckPrimeNumber [Java Application] C:\Users\Williams\.p2\pool\plugins\
1623 is not a prime number.
30°C
Partly sunny
Search
ENG
IN
1:33 PM
7/1/2023


eclipse-workspace - LabPractice/src/javaLabCard1/CalculateAverageOfNNumber.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
CoreJavaBasic
JRE System Library [JavaSE-17]
src
LabPractice
JRE System Library [JavaSE-17]
src
javaLabCard1
CalculateAverageOfNNumber.java
CheckPrimeNumber.java
helloworld.java
ImplicitAndExplicitInDataTypes.java
PrimitiveTypes.java
helloworld.java
PrimitiveTypes.java
ImplicitAndExplicitInDataTypes.java
CheckPrimeNumber.java
1 package javaLabCard1;
2
3 public class CalculateAverageOfNNumber {
4 public static void main(String[] args) {
5 // Example array of numbers
6 int[] numbers = {1,2,6,24,120,720,5040};
7 double average = calculateAverage(numbers);
8 System.out.println("Average: " + average);
9 }
10
11 public static double calculateAverage(int[] numbers) {
12 int sum = 0;
13 for (int number : numbers) {
14 sum += number;
15 }
16 return (double) sum / numbers.length;
17 }
18 }
19
20
21
Console
Problems
<terminated> CalculateAverageOfNNumber [Java Application] C:\Users\Williams\.p2\poo
Average: 844.7142857142857
31°C
Partly sunny
Search
ENG
IN
1:41 PM
7/1/2023