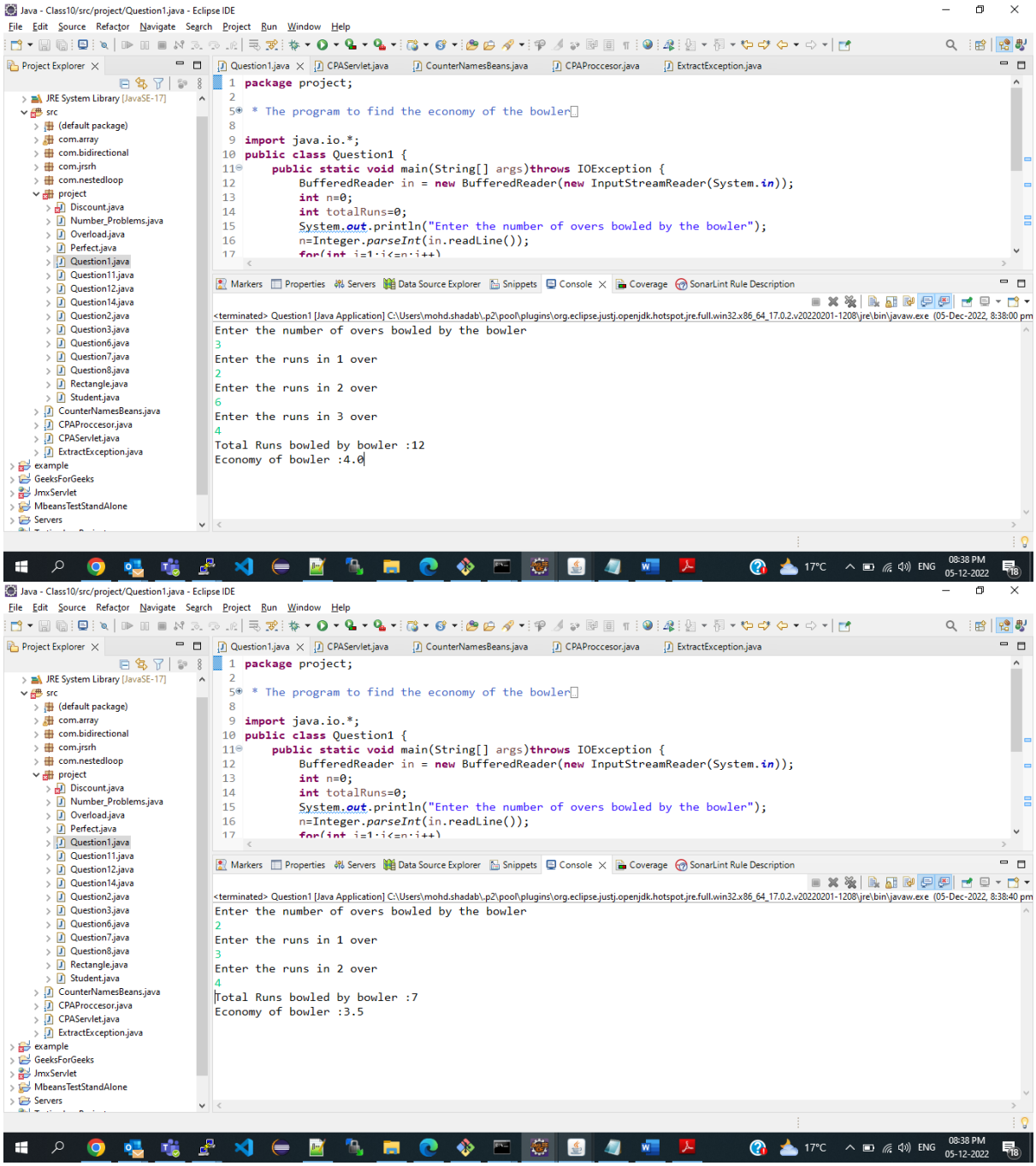
1. Write a program that computes economy rate for a bowler who bowled 6 runs in his first over, 13 runs in second over, 4 runs in third over and 7 runs in his last over.

```
package project;


/**
 *
 * The program to find the economy of the bowler
 *
 */


import java.io.*;
public class Question1 {
	public static void main(String[] args)throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		int n=0;
		int totalRuns=0;
		System.out.println("Enter the number of overs bowled by the bowler");
		n=Integer.parseInt(in.readLine());
		for(int i=1;i<=n;i++)
		{
			System.out.println("Enter the runs in "+i+" over");
			int runs=Integer.parseInt(in.readLine());
			totalRuns+=runs;
		}
		double avg=totalRuns/(double)(n);
		System.out.println("Total Runs bowled by bowler :"+totalRuns);
		System.out.println("Economy of bowler :"+avg);
	}
}
```


Java - Class10/src/project/Question1.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java
CPAServlet.java
CounterNamesBeans.java
CPAProccesor.java
ExtractException.java
1 package project;
5 * The program to find the economy of the bowler
9 import java.io.*;
10 public class Question1 {
11 public static void main(String[] args)throws IOException {
12 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
13 int n=0;
14 int totalRuns=0;
15 System.out.println("Enter the number of overs bowled by the bowler");
16 n=Integer.parseInt(in.readLine());
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question1 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:38:00 pm
Enter the number of overs bowled by the bowler
3
Enter the runs in 1 over
2
Enter the runs in 2 over
6
Enter the runs in 3 over
4
Total Runs bowled by bowler :12
Economy of bowler :4.0
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
17°C
ENG
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05-12-2022

Java - Class10/src/project/Question1.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java
CPAServlet.java
CounterNamesBeans.java
CPAProccesor.java
ExtractException.java
1 package project;
5 * The program to find the economy of the bowler
9 import java.io.*;
10 public class Question1 {
11 public static void main(String[] args)throws IOException {
12 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
13 int n=0;
14 int totalRuns=0;
15 System.out.println("Enter the number of overs bowled by the bowler");
16 n=Integer.parseInt(in.readLine());
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question1 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:38:40 pm
Enter the number of overs bowled by the bowler
2
Enter the runs in 1 over
3
Enter the runs in 2 over
4
Total Runs bowled by bowler :7
Economy of bowler :3.5
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
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ENG
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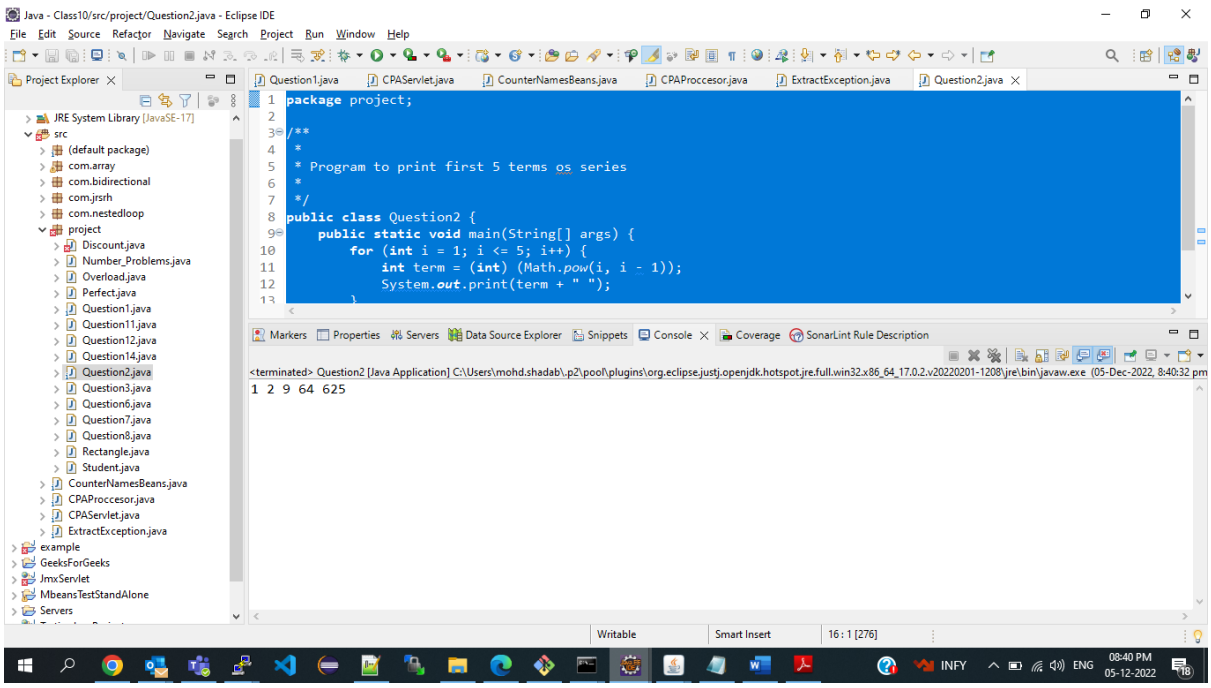
05-12-2022

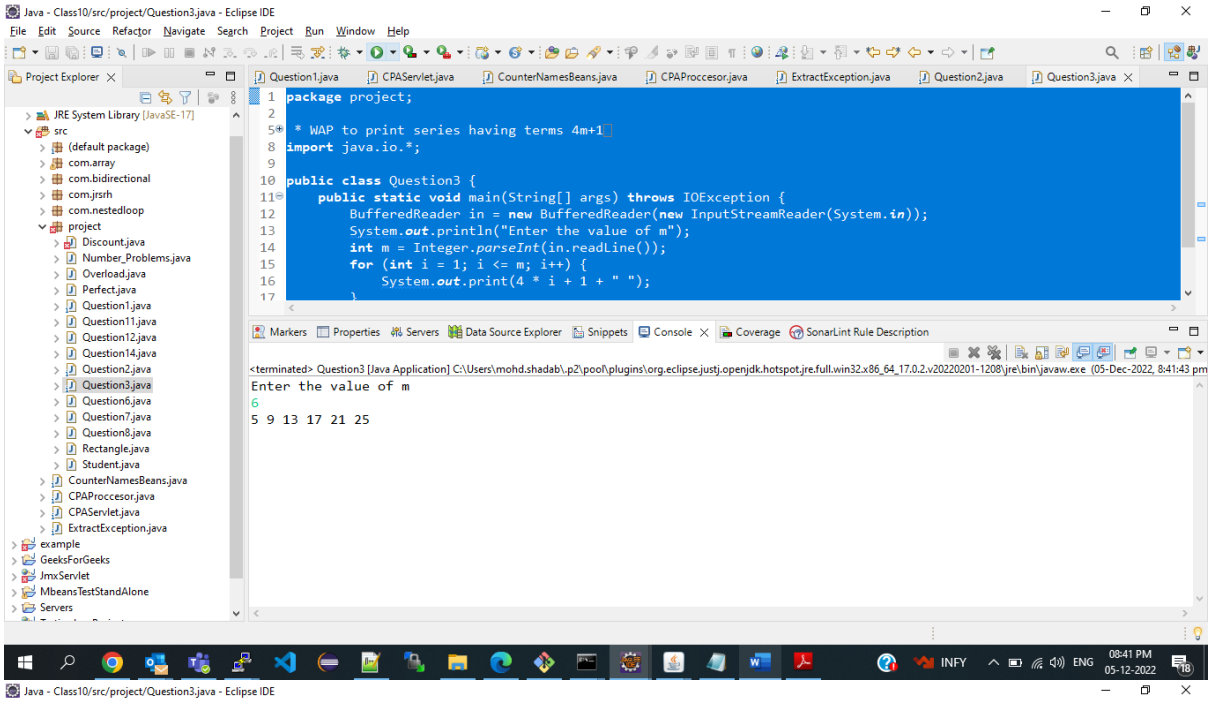
2. Write a program to print first 5 terms of series having terms as n_{n-1} i.e., 1, 2, 9……

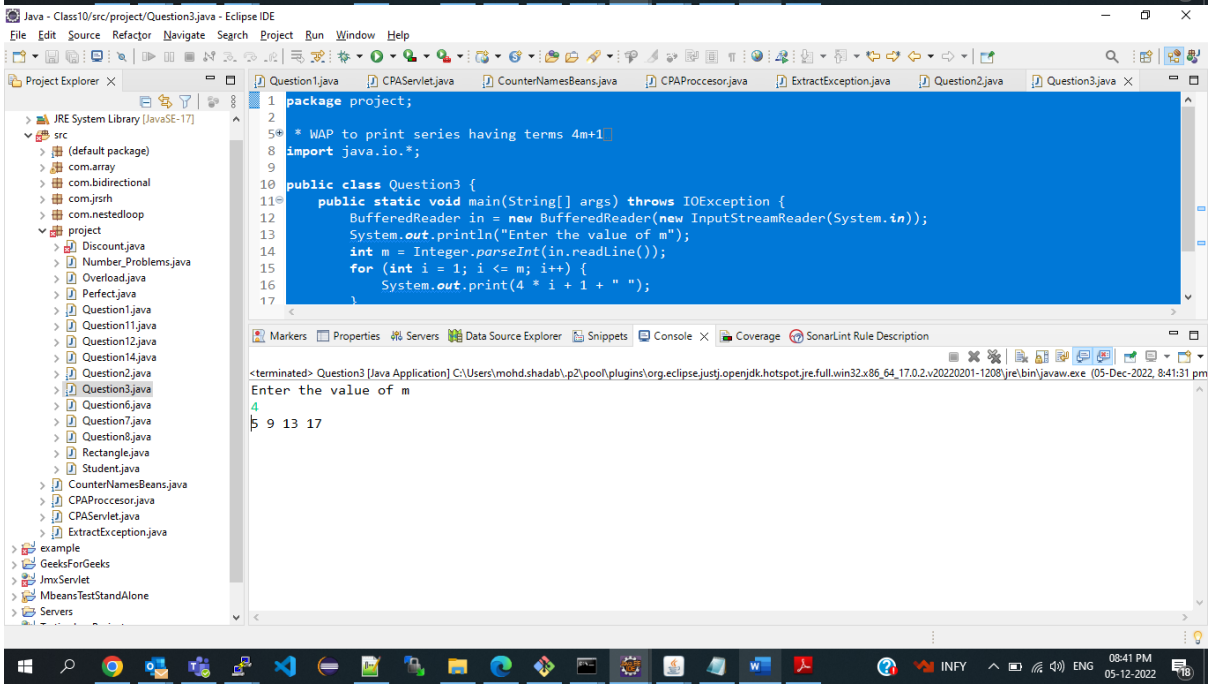
```
package project;

/**
 *
 * Program to print first 5 terms os series
 *
 */
public class Question2 {
	public static void main(String[] args) {
		for (int i = 1; i <= 5; i++) {
			int term = (int) (Math.pow(i, i - 1));
			System.out.print(term + " ");
		}
	}
}
```



3. Write a program to print series having terms as 4M + 1(print first M numbers).

```
package project;

/**
 *
 * WAP to print series having terms 4m+1
 *
 */
import java.io.*;

public class Question3 {
	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Enter the value of m");
		int m = Integer.parseInt(in.readLine());
		for (int i = 1; i <= m; i++) {
			System.out.print(4 * i + 1 + " ");
		}
	}
}
```

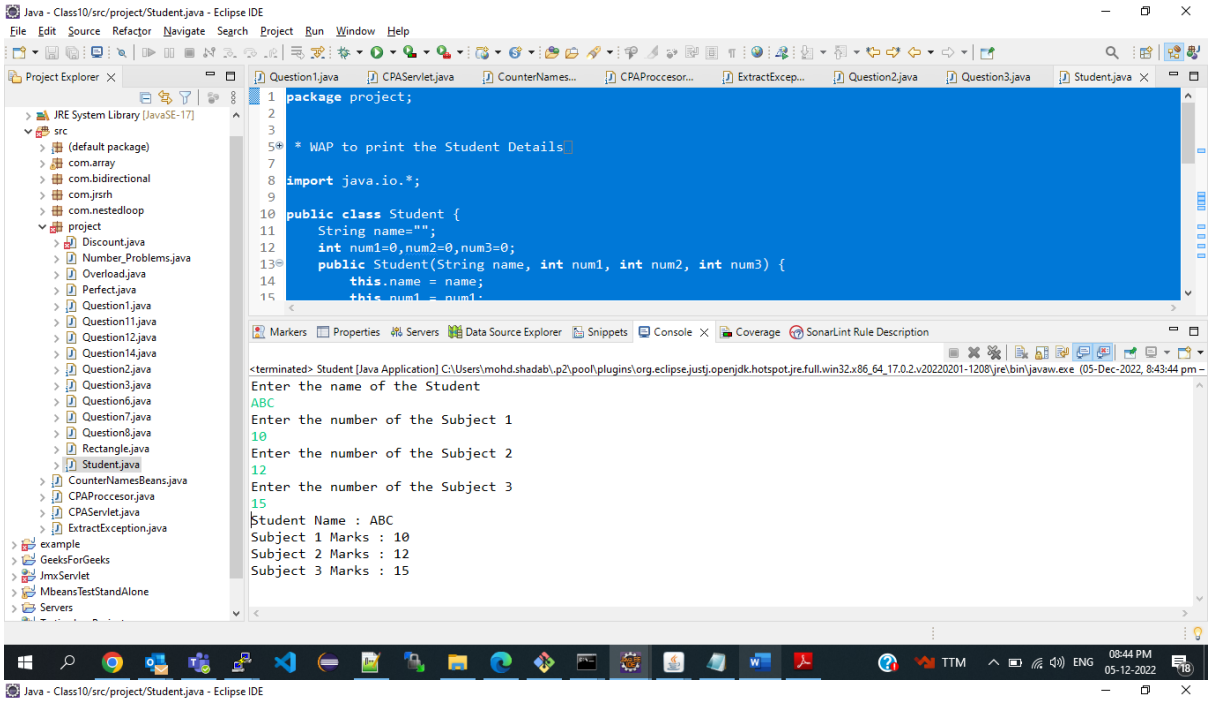

Java - Class10/src/project/Question3.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java CPAServlet.java CounterNamesBeans.java CPAProccesor.java ExtractException.java Question2.java Question3.java
1 package project;
2
5 * WAP to print series having terms 4m+1
8 import java.io.*;
9
10 public class Question3 {
11 public static void main(String[] args) throws IOException {
12 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
13 System.out.println("Enter the value of m");
14 int m = Integer.parseInt(in.readLine());
15 for (int i = 1; i <= m; i++) {
16 System.out.print(4 * i + 1 + " ");
17 }
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question3 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:41:43 pm
Enter the value of m
6
5 9 13 17 21 25
INFY ENG 08:41 PM 05-12-2022


Java - Class10/src/project/Question3.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java CPAServlet.java CounterNamesBeans.java CPAProccesor.java ExtractException.java Question2.java Question3.java
1 package project;
2
5 * WAP to print series having terms 4m+1
8 import java.io.*;
9
10 public class Question3 {
11 public static void main(String[] args) throws IOException {
12 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
13 System.out.println("Enter the value of m");
14 int m = Integer.parseInt(in.readLine());
15 for (int i = 1; i <= m; i++) {
16 System.out.print(4 * i + 1 + " ");
17 }
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question3 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:41:31 pm
Enter the value of m
4
5 9 13 17
INFY ENG 08:41 PM 05-12-2022

4. Write a program that implements a class namely Student with fields to store student's name and marks of three subjects. Add constructor and other related methods to the class.

```
package project;



/**
 * WAP to print the Student Details
 */


import java.io.*;


public class Student {
	String name="";
	int num1=0,num2=0,num3=0;
	public Student(String name, int num1, int num2, int num3) {
		this.name = name;
		this.num1 = num1;
		this.num2 = num2;
		this.num3 = num3;
	}
	public void printDetails()
	{
		System.out.println("Student Name : "+this.name);
		System.out.println("Subject 1 Marks : "+this.num1);
		System.out.println("Subject 2 Marks : "+this.num2);
		System.out.println("Subject 3 Marks : "+this.num3);
	}
	public static void main(String[] args)throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Enter the name of the Student");
		String name=in.readLine();
		System.out.println("Enter the number of the Subject 1");
```

```
            int num1=Integer.parseInt(in.readLine());
            System.out.println("Enter the number of the Subject 2");
            int num2=Integer.parseInt(in.readLine());
            System.out.println("Enter the number of the Subject 3");
            int num3=Integer.parseInt(in.readLine());
            Student obj=new Student(name, num1, num2, num3);
            obj.printDetails();
        }
}
```


Java - Class10/src/project/Student.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java CPAServlet.java CounterNames... CPAProccesor... ExtractExcep... Question2.java Question3.java Student.java
1 package project;
5 * WAP to print the Student Details
8 import java.io.*;
10 public class Student {
11 String name="";
12 int num1=0,num2=0,num3=0;
13 public Student(String name, int num1, int num2, int num3) {
14 this.name = name;
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Student [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:43:44 pm –
Enter the name of the Student
ABC
Enter the number of the Subject 1
10
Enter the number of the Subject 2
12
Enter the number of the Subject 3
15
Student Name : ABC
Subject 1 Marks : 10
Subject 2 Marks : 12
Subject 3 Marks : 15
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
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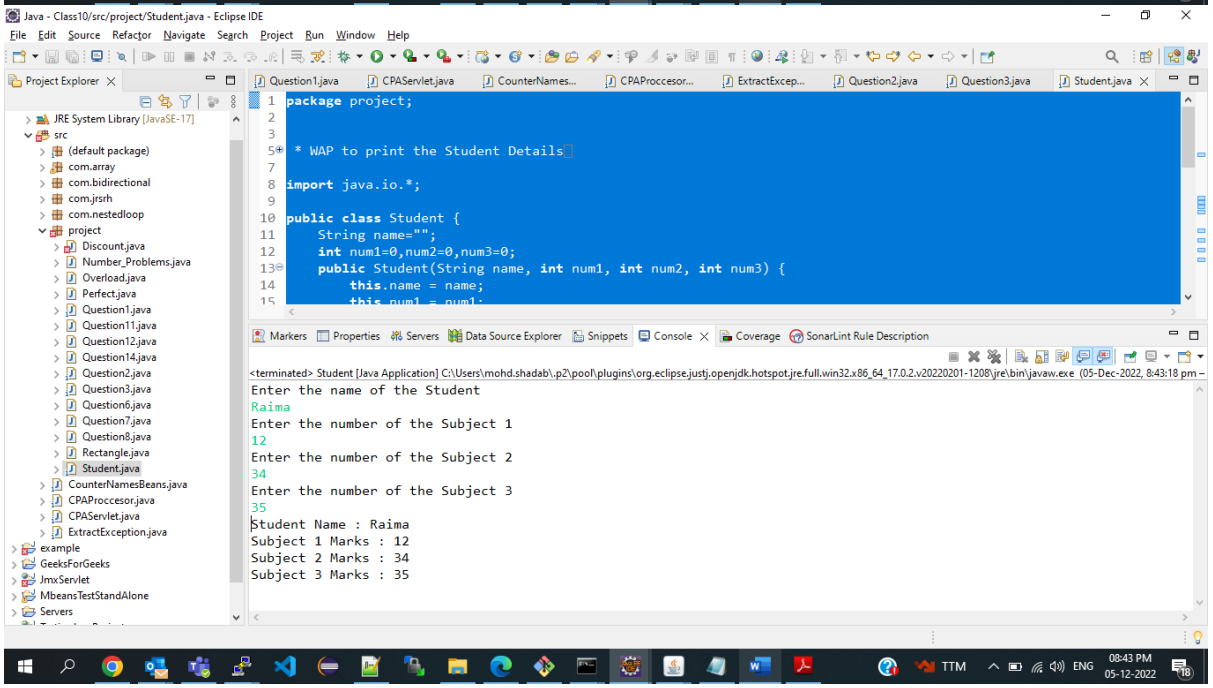
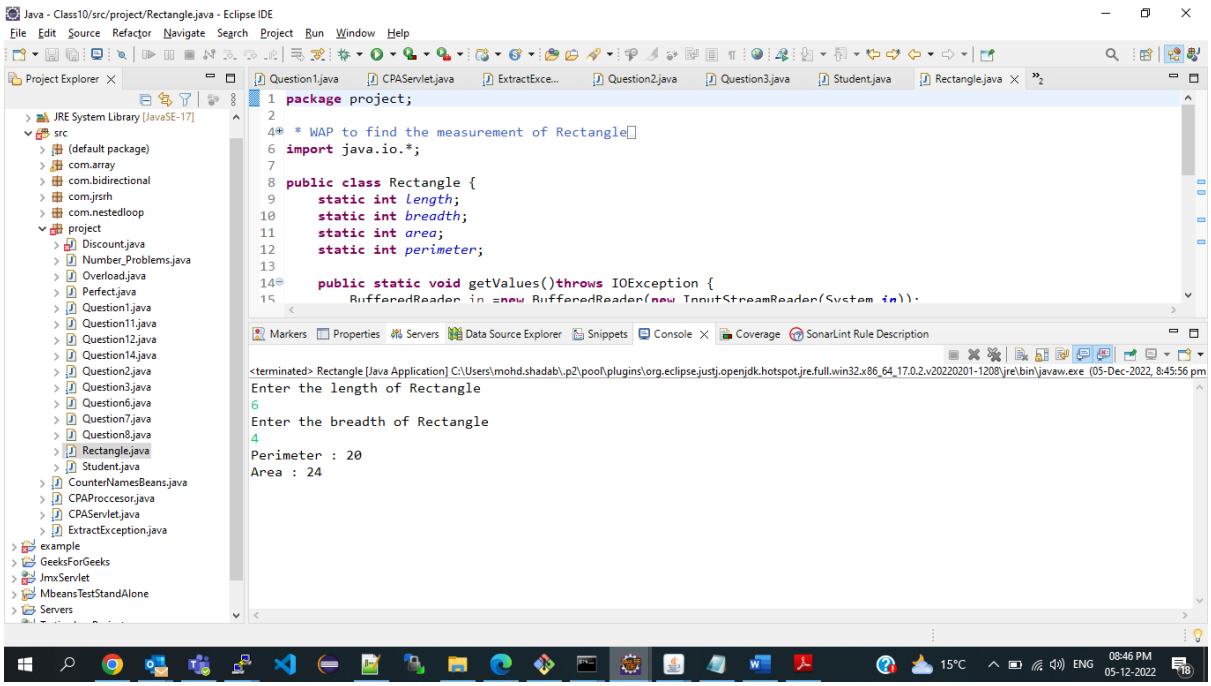
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
TTM ENG 08:44 PM 05-12-2022

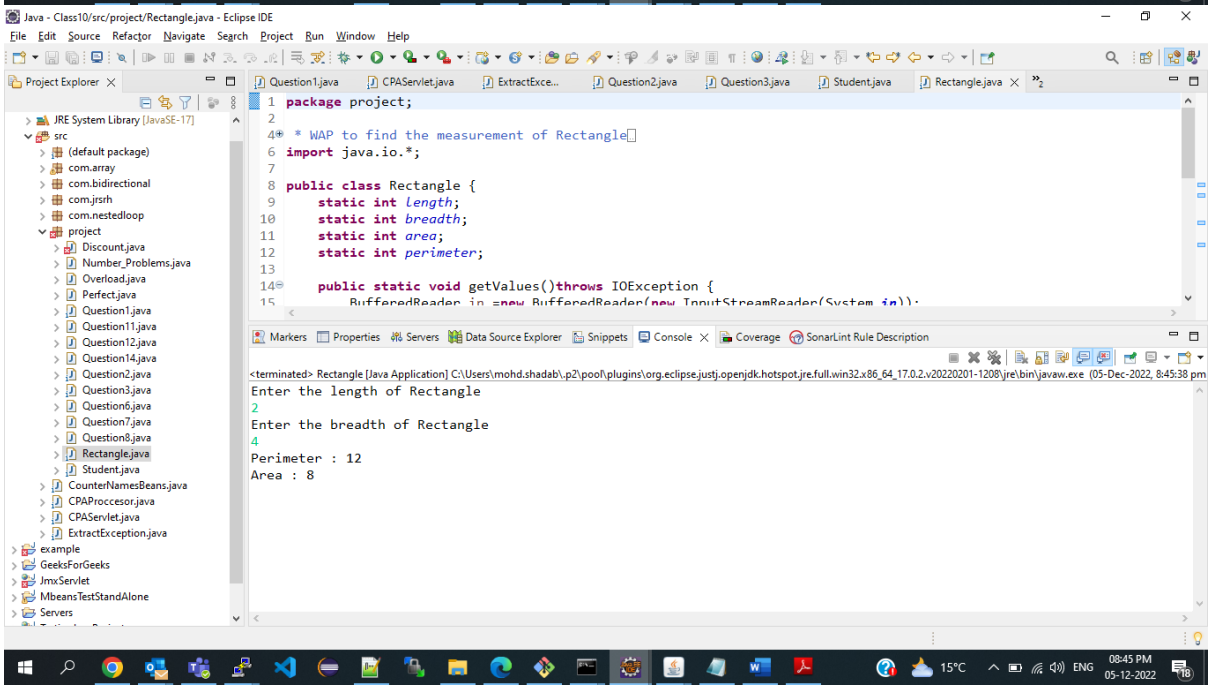

Java - Class10/src/project/Student.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java CPAServlet.java CounterNames... CPAProccesor... ExtractExcep... Question2.java Question3.java Student.java
1 package project;
5 * WAP to print the Student Details
8 import java.io.*;
10 public class Student {
11 String name="";
12 int num1=0,num2=0,num3=0;
13 public Student(String name, int num1, int num2, int num3) {
14 this.name = name;
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Student [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:43:18 pm –
Enter the name of the Student
Raima
Enter the number of the Subject 1
12
Enter the number of the Subject 2
34
Enter the number of the Subject 3
35
Student Name : Raima
Subject 1 Marks : 12
Subject 2 Marks : 34
Subject 3 Marks : 35
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
TTM ENG 08:43 PM 05-12-2022

5. Write a program that implements a Rectangle class. The rectangle class has fields: length, breadth, re and perimeter. It has static methods: to obtain values of length and breadth, to calculate area and to calculate perimeter.

```
package project;


/**
 * WAP to find the measurement of Rectangle
 */
import java.io.*;


public class Rectangle {
	static int length;
	static int breadth;
	static int area;
	static int perimeter;

	public static void getValues()throws IOException {
		BufferedReader in =new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Enter the length of Rectangle");
		length=Integer.parseInt(in.readLine());
		System.out.println("Enter the breadth of Rectangle");
		breadth=Integer.parseInt(in.readLine());
	}

	public static void calArea() {
		System.out.println("Area : "+(length*breadth));
	}

	public static void calPeri() {
		System.out.println("Perimeter : "+(2*(length+breadth)));
	}
	public static void main(String[] args)throws IOException {
```

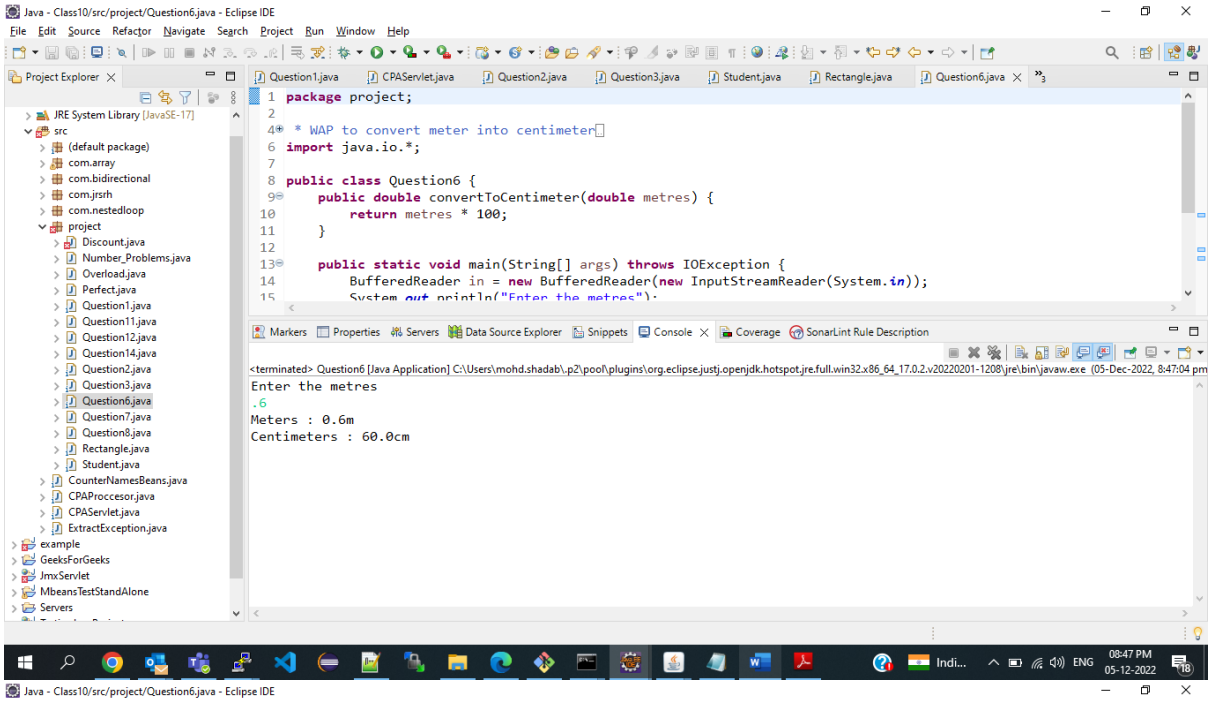
```
            getValues();
            calPeri();
            calArea();
        }
}
```

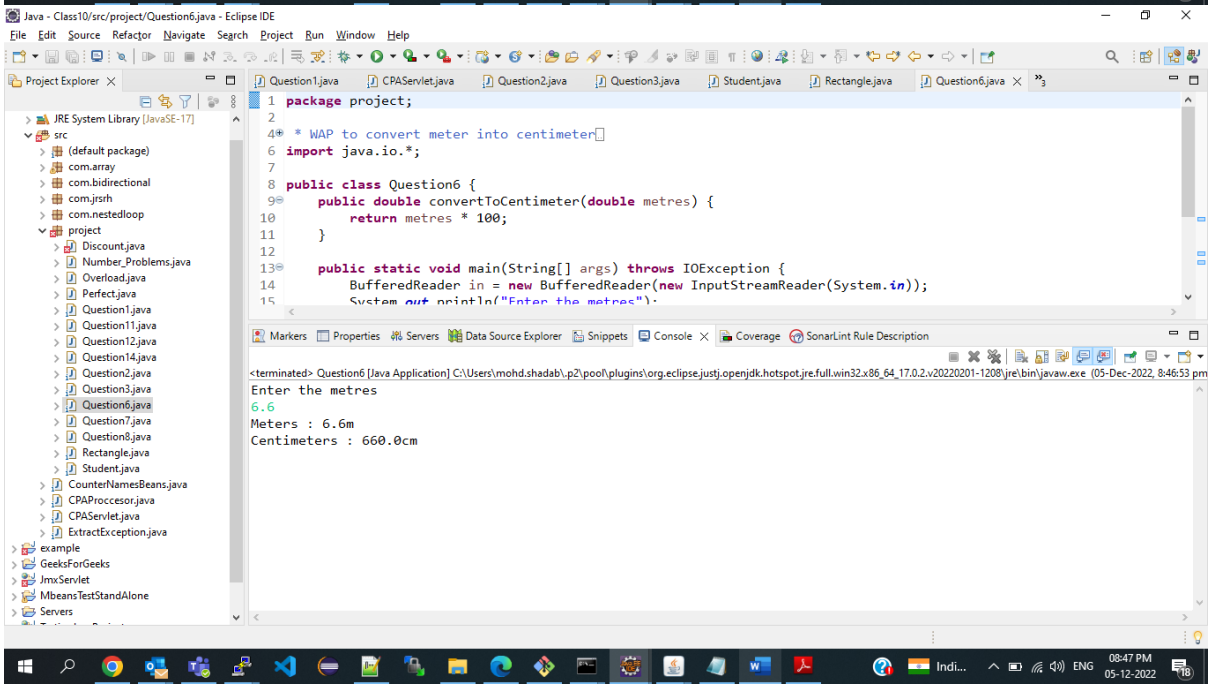




6. Write a class having a method that receives distance in meters and returns in centimeters. Invoke a method through main( ).(Hint: 1 meter= 100 centimeters)

```
package project;


/**
 * WAP to convert meter into centimeter
 */
import java.io.*;


public class Question6 {
	public double convertToCentimeter(double metres) {
		return metres * 100;
	}

	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Enter the metres");
		double meters = Double.parseDouble(in.readLine());
		Question6 obj = new Question6();
		double centiMeters = obj.convertToCentimeter(meters);
		System.out.println("Meters : " + meters + "m");
		System.out.println("Centimeters : " + centiMeters + "cm");
	}
}
```

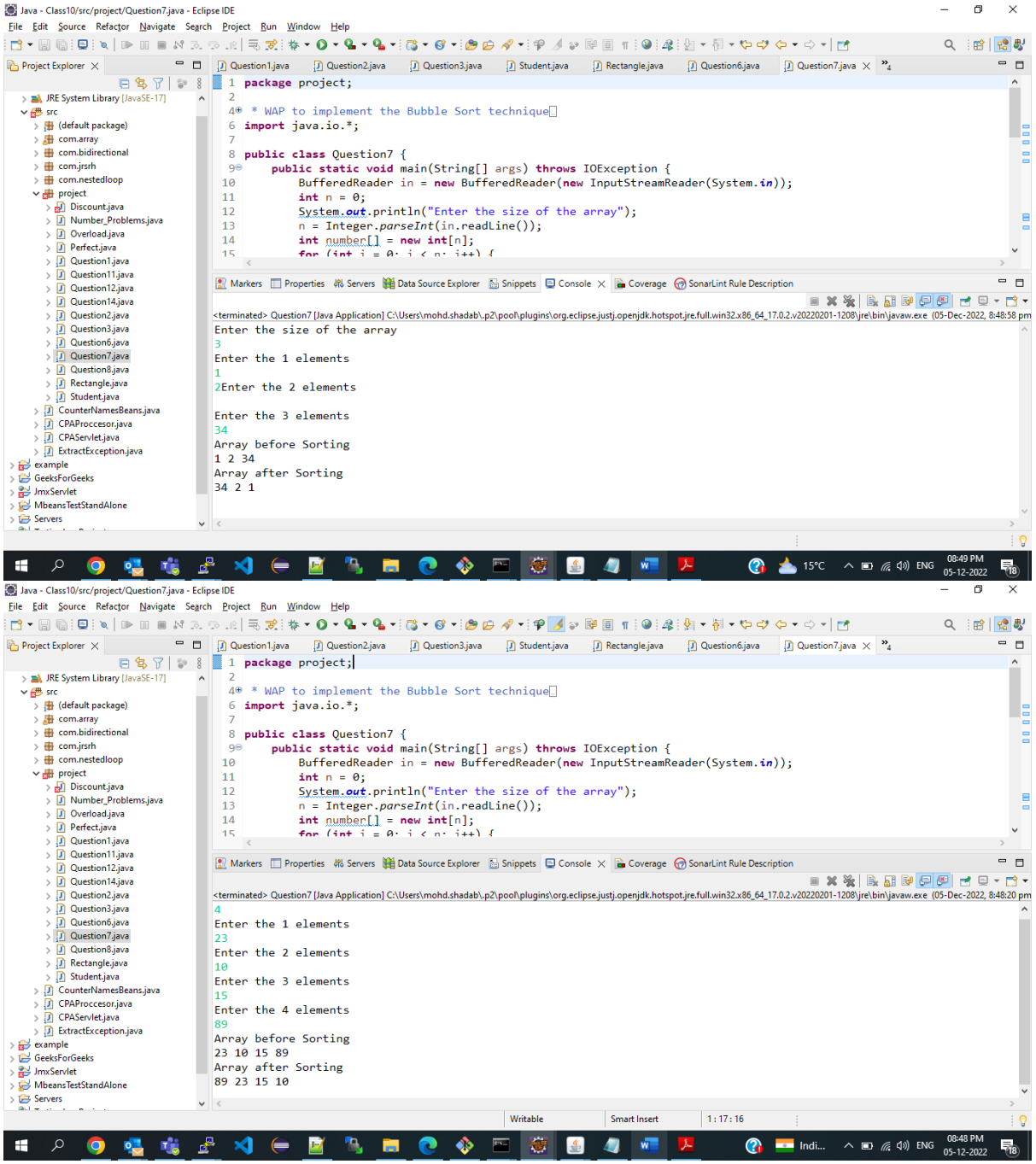

Java - Class10/src/project/Question6.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java CPAServlet.java Question2.java Question3.java Student.java Rectangle.java Question6.java
1 package project;
4 * WAP to convert meter into centimeter
6 import java.io.*;
8 public class Question6 {
9 public double convertToCentimeter(double metres) {
10 return metres * 100;
11 }
13 public static void main(String[] args) throws IOException {
14 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question6 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:47:04 pm
Enter the metres
.6
Meters : 0.6m
Centimeters : 60.0cm
08:47 PM
05-12-2022


Java - Class10/src/project/Question6.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java CPAServlet.java Question2.java Question3.java Student.java Rectangle.java Question6.java
1 package project;
4 * WAP to convert meter into centimeter
6 import java.io.*;
8 public class Question6 {
9 public double convertToCentimeter(double metres) {
10 return metres * 100;
11 }
13 public static void main(String[] args) throws IOException {
14 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question6 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:46:53 pm
Enter the metres
6.6
Meters : 6.6m
Centimeters : 660.0cm
08:47 PM
05-12-2022

7. Write a program to input 10 integer elements in a single dimensional array and sort them in descending order using the *bubble sort technique.* Display the original array elements and after sorting.

```
package project;


/**
 * WAP to implement the Bubble Sort technique
 */
import java.io.*;


public class Question7 {
	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		int n = 0;
		System.out.println("Enter the size of the array");
		n = Integer.parseInt(in.readLine());
		int number[] = new int[n];
		for (int i = 0; i < n; i++) {
			System.out.println("Enter the " + (i + 1) + " elements");
			number[i] = Integer.parseInt(in.readLine());
		}
		System.out.println("Array before Sorting");
		for (int i = 0; i < n; i++) {
			System.out.print(number[i]+" ");
		}

		for(int i=0;i<n-1;i++)
		{
			for(int j=0;j<n-1-i;j++)
			{
				if(number[j]<number[j+1]) {
					int temp=number[j];
```

```
                                        number[j]=number[j+1];
                                        number[j+1]=temp;
                                }
                        }
                }
                System.out.println();
                System.out.println("Array after Sorting");
                for (int i = 0; i < n; i++) {
                        System.out.print(number[i]+" ");
                }
        }
}
```


Java - Class10/src/project/Question7.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java Question2.java Question3.java Student.java Rectangle.java Question6.java Question7.java
1 package project;
2
4 * WAP to implement the Bubble Sort technique
6 import java.io.*;
7
8 public class Question7 {
9 public static void main(String[] args) throws IOException {
10 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
11 int n = 0;
12 System.out.println("Enter the size of the array");
13 n = Integer.parseInt(in.readLine());
14 int number[] = new int[n];
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question7 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:48:58 pm
Enter the size of the array
3
Enter the 1 elements
1
2Enter the 2 elements
Enter the 3 elements
34
Array before Sorting
1 2 34
Array after Sorting
34 2 1
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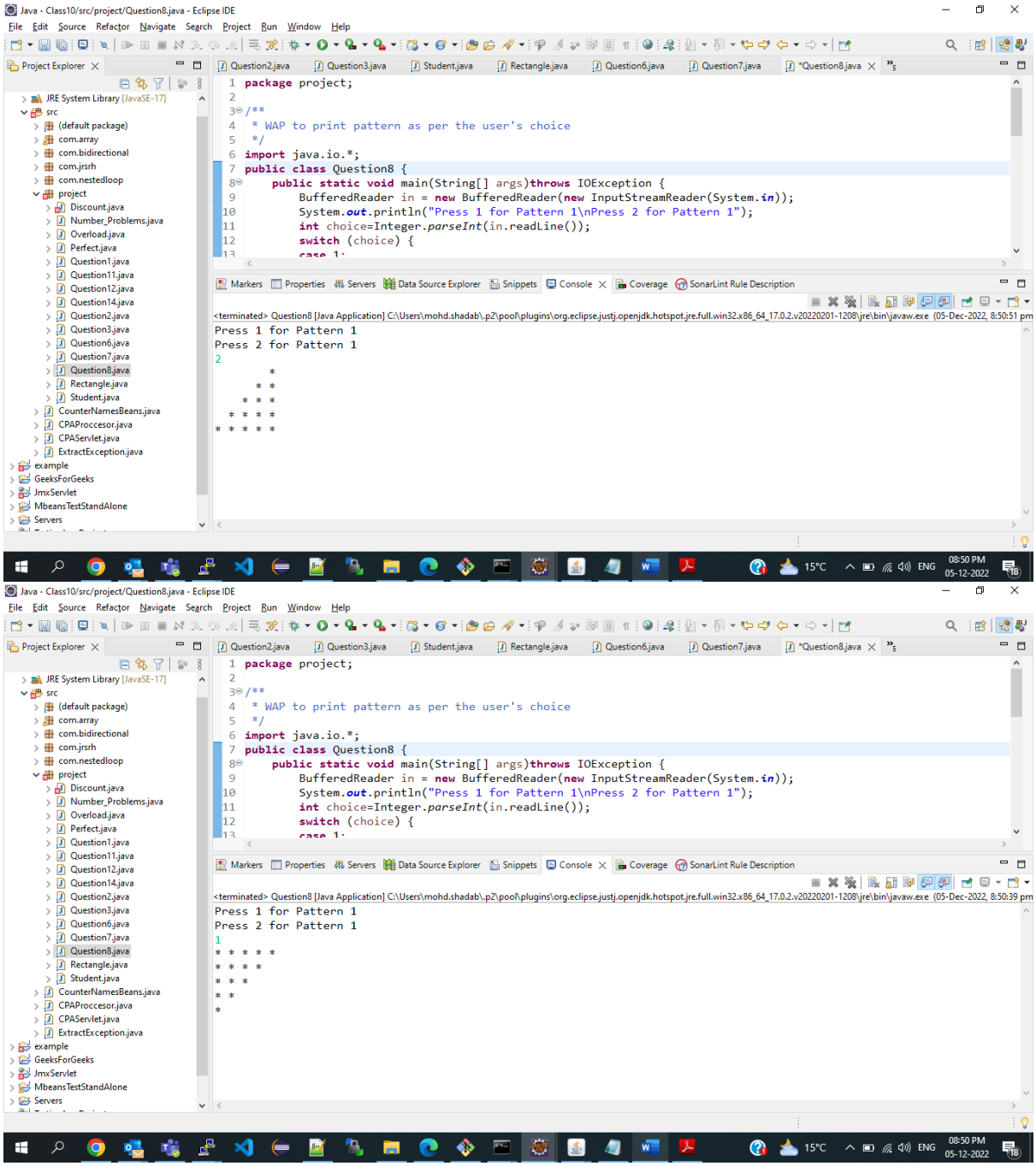
Java - Class10/src/project/Question7.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question1.java Question2.java Question3.java Student.java Rectangle.java Question6.java Question7.java
1 package project;
2
4 * WAP to implement the Bubble Sort technique
6 import java.io.*;
7
8 public class Question7 {
9 public static void main(String[] args) throws IOException {
10 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
11 int n = 0;
12 System.out.println("Enter the size of the array");
13 n = Integer.parseInt(in.readLine());
14 int number[] = new int[n];
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question7 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:48:20 pm
4
Enter the 1 elements
23
Enter the 2 elements
10
Enter the 3 elements
15
Enter the 4 elements
89
Array before Sorting
23 10 15 89
Array after Sorting
89 23 15 10
Writable Smart Insert 1 : 17 : 16
Indi... ENG 08:48 PM 05-12-2022

8. Write a menu driven program to print the following patterns:
CHOICE 1: CHOICE 2:

```
package project;


/**
 * WAP to print pattern as per the user's choice
 */
import java.io.*;
public class Question8 {
	public static void main(String[] args)throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Press 1 for Pattern 1\nPress 2 for Pattern 1");
		int choice=Integer.parseInt(in.readLine());
		switch (choice) {
		case 1:
			for(int i=5;i>=1;i--)
			{
				for(int j=1;j<=i;j++) {
					System.out.print("* ");
				}
				System.out.println();
			}
			break;
		case 2:
			int m=8;
			for(int i=1;i<=5;i++)
			{
				for(int k=1;k<=m;k++) {
					System.out.print(" ");
				}
				for(int j=1;j<=i;j++) {
					System.out.print("* ");
```

```
                    }
                    System.out.println();
                    m=m-2;
                }
                break;
            default:
                System.out.println("Wrong Choice");
            }
        }
}
```

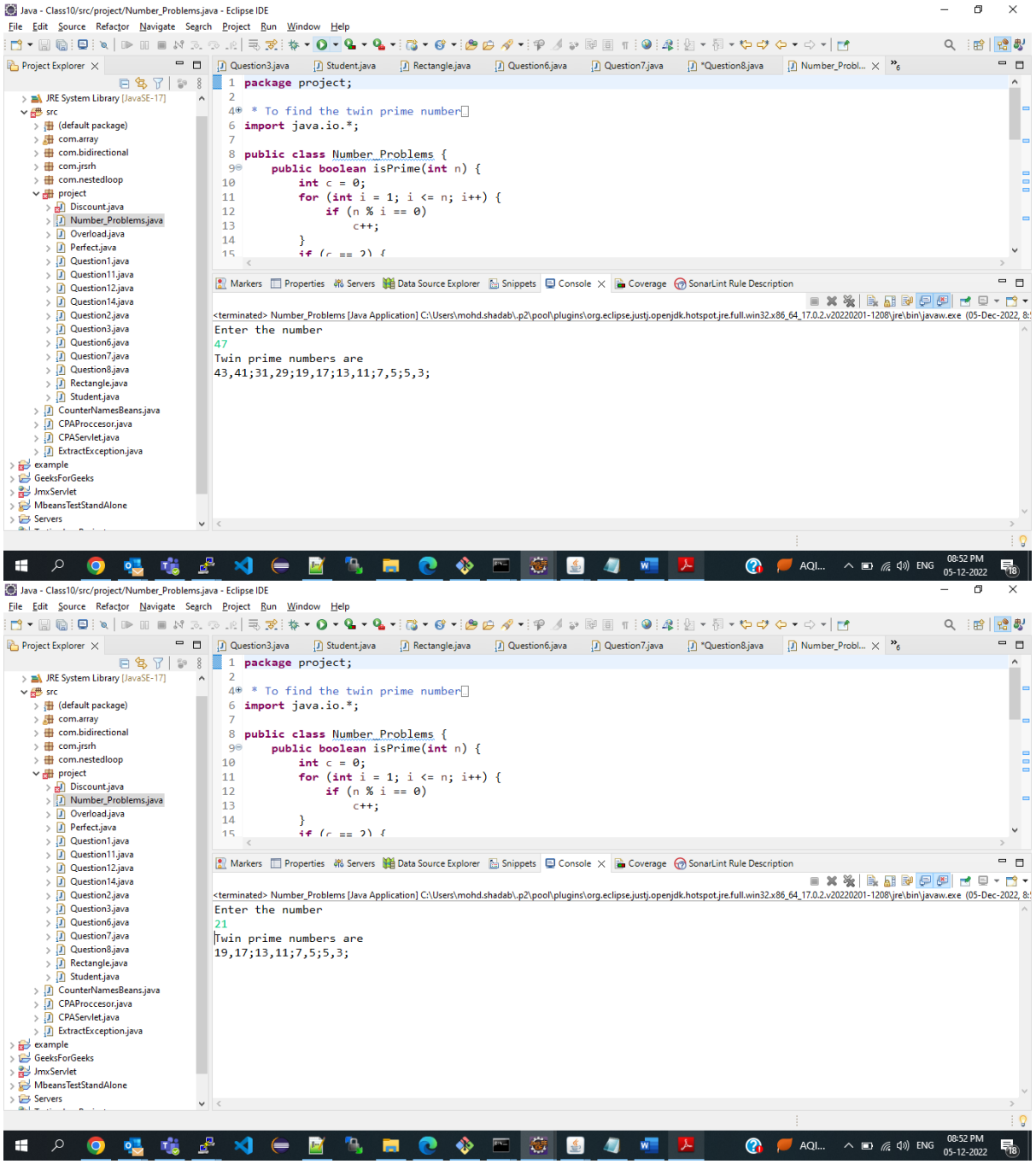

Java - Class10/src/project/Question8.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question2.java Question3.java Student.java Rectangle.java Question6.java Question7.java *Question8.java
1 package project;
2
3 /**
4 * WAP to print pattern as per the user's choice
5 */
6 import java.io.*;
7 public class Question8 {
8 public static void main(String[] args)throws IOException {
9 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
10 System.out.println("Press 1 for Pattern 1\nPress 2 for Pattern 1");
11 int choice=Integer.parseInt(in.readLine());
12 switch (choice) {
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question8 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:50:51 pm
Press 1 for Pattern 1
Press 2 for Pattern 1
2
*
* *
* * *
* * * *
* * * * *
15°C ENG 08:50 PM 05-12-2022

Java - Class10/src/project/Question8.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Question2.java Question3.java Student.java Rectangle.java Question6.java Question7.java *Question8.java
1 package project;
2
3 /**
4 * WAP to print pattern as per the user's choice
5 */
6 import java.io.*;
7 public class Question8 {
8 public static void main(String[] args)throws IOException {
9 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
10 System.out.println("Press 1 for Pattern 1\nPress 2 for Pattern 1");
11 int choice=Integer.parseInt(in.readLine());
12 switch (choice) {
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question8 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:50:39 pm
Press 1 for Pattern 1
Press 2 for Pattern 1
1
* * * * *
* * * *
* * *
* *
*
15°C ENG 08:50 PM 05-12-2022

9. Twin Primes are the numbers whose difference is 2. For example: 3, 5; 5, 7; 11, 13; 17, 19…etc. Define a class Number_Problems with suitable methods which takes an integer argument and prints out all the twin primes below that number.

```
package project;


/**
 * To find the twin prime number
 */
import java.io.*;


public class Number_Problems {
	public boolean isPrime(int n) {
		int c = 0;
		for (int i = 1; i <= n; i++) {
			if (n % i == 0)
				c++;
		}
		if (c == 2) {
			return true;
		} else {
			return false;
		}
	}

	public void findTwin(int upperLimit) {
		System.out.println("Twin prime numbers are");
		for (int i = upperLimit; i >= 2; i--) {
			int num1 = i, num2 = i - 2;
			if (isPrime(num1) && isPrime(num2)) {
				System.out.print(num1 + "," + num2 + ";");
			}
		}
```

```
    }

    public static void main(String[] args) throws IOException {
        BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
        System.out.println("Enter the number");
        int n = Integer.parseInt(in.readLine());
        Number_Problems obj = new Number_Problems();
        obj.findTwin(n);
    }
}
```

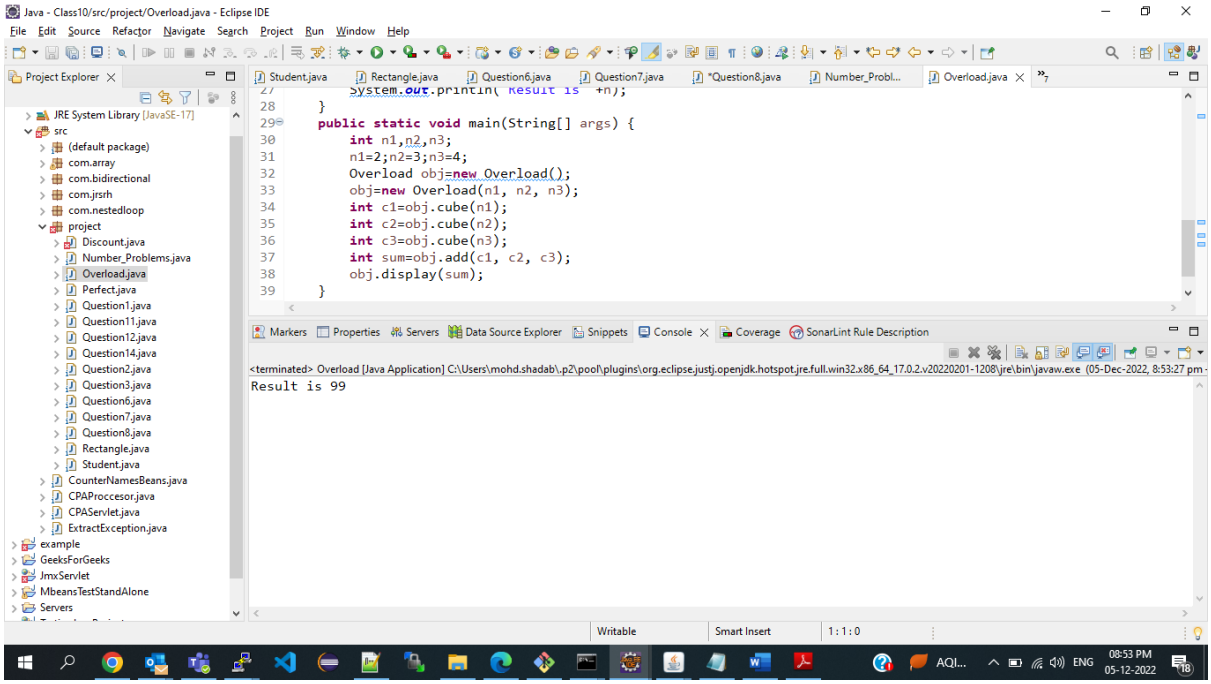

Java - Class10/src/project/Number_Problems.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
Question3.java
Student.java
Rectangle.java
Question6.java
Question7.java
*Question8.java
Number_Probl...
1 package project;
4 * To find the twin prime number
6 import java.io.*;
8 public class Number_Problems {
9 public boolean isPrime(int n) {
10 int c = 0;
11 for (int i = 1; i <= n; i++) {
12 if (n % i == 0)
13 c++;
14 }
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Number_Problems [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022,
Enter the number
47
Twin prime numbers are
43,41;31,29;19,17;13,11;7,5;5,3;
AQI...
ENG
08:52 PM
05-12-2022

Java - Class10/src/project/Number_Problems.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
Question3.java
Student.java
Rectangle.java
Question6.java
Question7.java
*Question8.java
Number_Probl...
1 package project;
4 * To find the twin prime number
6 import java.io.*;
8 public class Number_Problems {
9 public boolean isPrime(int n) {
10 int c = 0;
11 for (int i = 1; i <= n; i++) {
12 if (n % i == 0)
13 c++;
14 }
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Number_Problems [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022,
Enter the number
21
Twin prime numbers are
19,17;13,11;7,5;5,3;
AQI...
ENG
08:52 PM
05-12-2022

10. Design a class Overload and perform the following:
Data members:
int n1, n2, n3 : instance variable that stores the integer value
Member methods:
Overload( ) : default constructor to initialize 0 in all the instance variables
Overload(int, int, int): parameterized constuctor to initialize values input by the user
int cube( ) : calculate the cube of each integer and cube in main( )
int add(int, int, int) : parameterized method to pass the cube of all three integers and return the sum of the cube of all three integers
void display(int) : parameterized method to display the result
Write main( ) method to input, pass values and get return to and from methods and definition of other methods and constructors mentioned above.

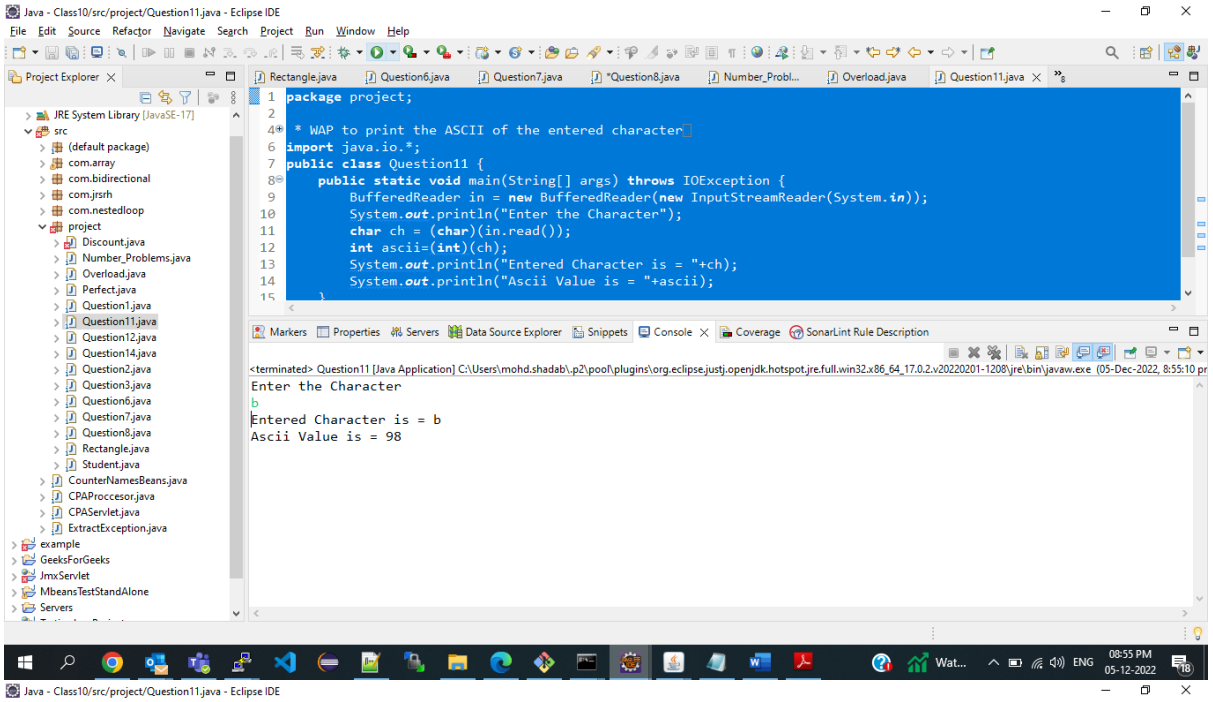
```
package project;

public class Overload {
	int n1, n2, n3;

	public Overload() {
		this.n1 = 0;
		this.n2 = 0;
		this.n3 = 0;
	}

	public Overload(int n1, int n2, int n3) {
		this.n1 = n1;
		this.n2 = n2;
		this.n3 = n3;
	}
	int cube(int n)
	{
		return n*n*n;
	}
	int add(int n1,int n2,int n3)
	{
		return n1+n2+n3;
	}
	void display(int n)
	{
		System.out.println("Result is "+n);
	}
	public static void main(String[] args) {
		int n1,n2,n3;
		n1=2;n2=3;n3=4;
		Overload obj=new Overload();
		obj=new Overload(n1, n2, n3);
		int c1=obj.cube(n1);
		int c2=obj.cube(n2);
		int c3=obj.cube(n3);
```

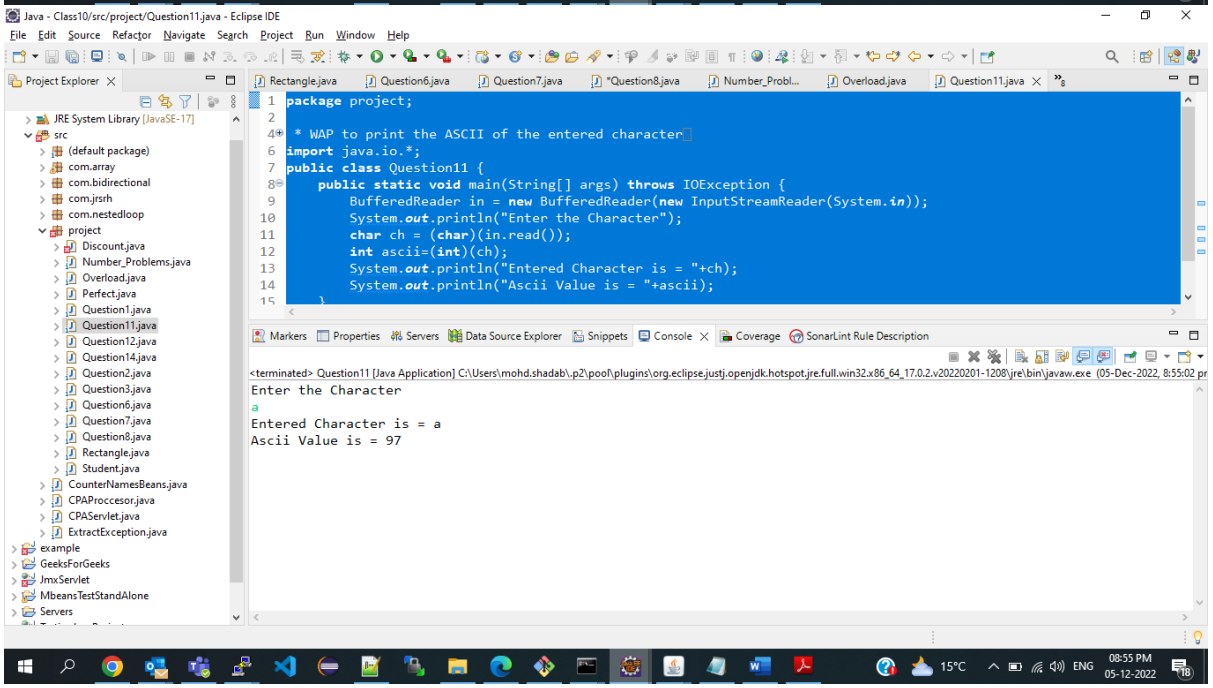
```
            int sum=obj.add(c1, c2, c3);
            obj.display(sum);
        }
}
```



11. Write a program to input a character and display its ascii code.

```
package project;


/**
 * WAP to print the ASCII of the entered character
 */
import java.io.*;
public class Question11 {
	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Enter the Character");
		char ch = (char)(in.read());
		int ascii=(int)(ch);
		System.out.println("Entered Character is = "+ch);
		System.out.println("Ascii Value is = "+ascii);
	}
}
```

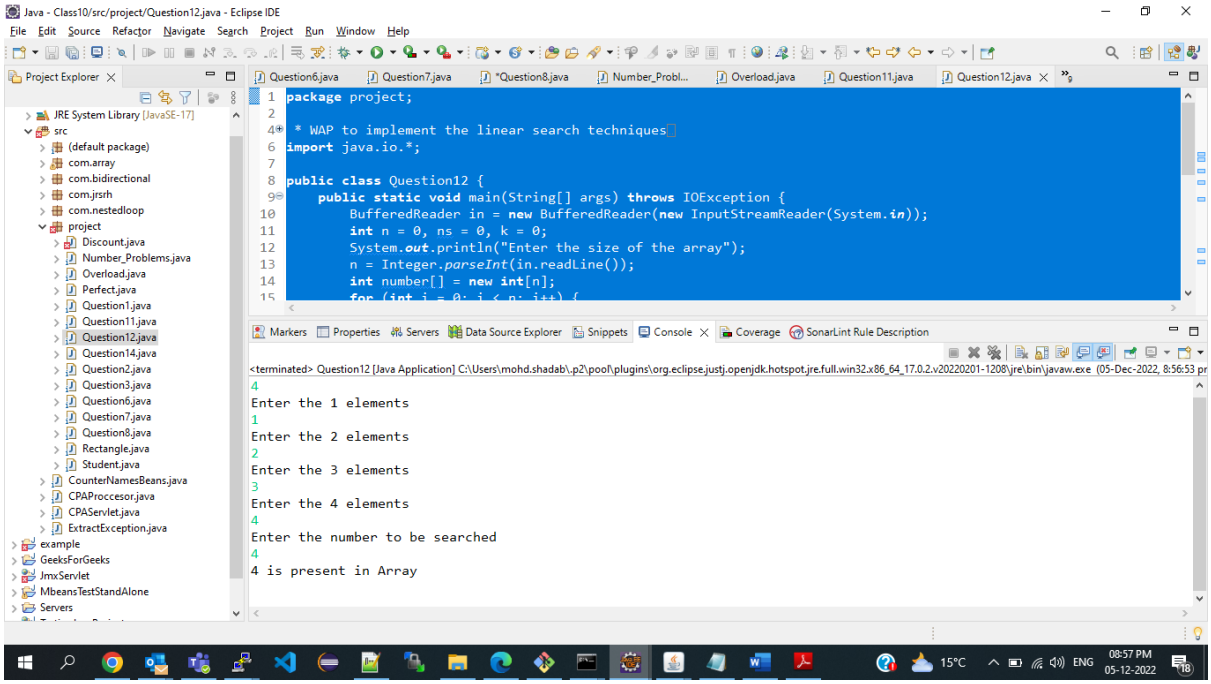

Java - Class10/src/project/Question11.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Rectangle.java Question6.java Question7.java *Question8.java Number_Probl... Overload.java Question11.java
1 package project;
2
4 * WAP to print the ASCII of the entered character
6 import java.io.*;
7 public class Question11 {
8 public static void main(String[] args) throws IOException {
9 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
10 System.out.println("Enter the Character");
11 char ch = (char)(in.read());
12 int ascii=(int)(ch);
13 System.out.println("Entered Character is = "+ch);
14 System.out.println("Ascii Value is = "+ascii);
15 }
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question11 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:55:10 pr
Enter the Character
b
Entered Character is = b
Ascii Value is = 98
08:55 PM
05-12-2022

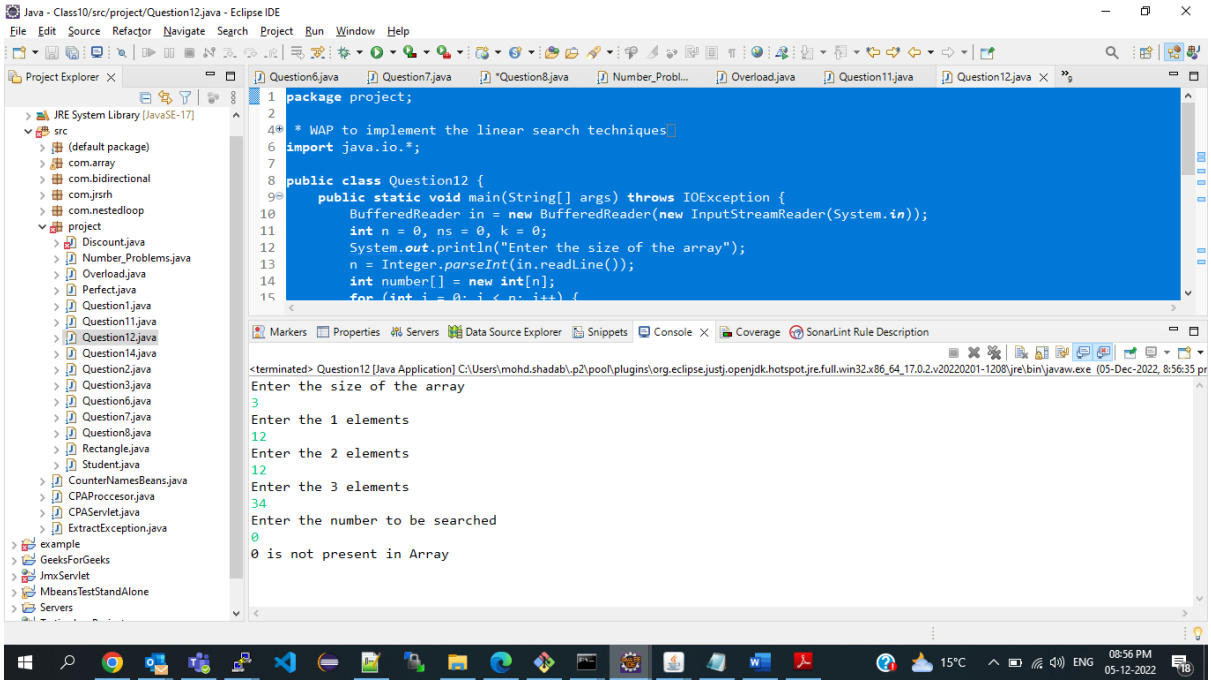

Java - Class10/src/project/Question11.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
Rectangle.java Question6.java Question7.java *Question8.java Number_Probl... Overload.java Question11.java
1 package project;
2
4 * WAP to print the ASCII of the entered character
6 import java.io.*;
7 public class Question11 {
8 public static void main(String[] args) throws IOException {
9 BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
10 System.out.println("Enter the Character");
11 char ch = (char)(in.read());
12 int ascii=(int)(ch);
13 System.out.println("Entered Character is = "+ch);
14 System.out.println("Ascii Value is = "+ascii);
15 }
Markers Properties Servers Data Source Explorer Snippets Console Coverage SonarLint Rule Description
<terminated> Question11 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.2.v20220201-1208\jre\bin\javaw.exe (05-Dec-2022, 8:55:02 pr
Enter the Character
a
Entered Character is = a
Ascii Value is = 97
08:55 PM
05-12-2022

12. Write a program to input an integer array and input another integer and search this in the given array using Linear Search technique. Display an appropriate message whether the number is found in the array or not.

```
package project;

/**
 * WAP to implement the linear search techniques
 */
import java.io.*;

public class Question12 {
	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		int n = 0, ns = 0, k = 0;
		System.out.println("Enter the size of the array");
		n = Integer.parseInt(in.readLine());
		int number[] = new int[n];
		for (int i = 0; i < n; i++) {
			System.out.println("Enter the " + (i + 1) + " elements");
			number[i] = Integer.parseInt(in.readLine());
		}
		System.out.println("Enter the number to be searched");
		ns = Integer.parseInt(in.readLine());
		for (int i = 0; i < n; i++) {
			if (number[i] == ns) {
				k = 1;
				break;
			}
		}
		if (k == 1) {
			System.out.println(ns + " is present in Array");
		} else {
```

```
                System.out.println(ns + " is not present in Array");
            }
        }
}
```

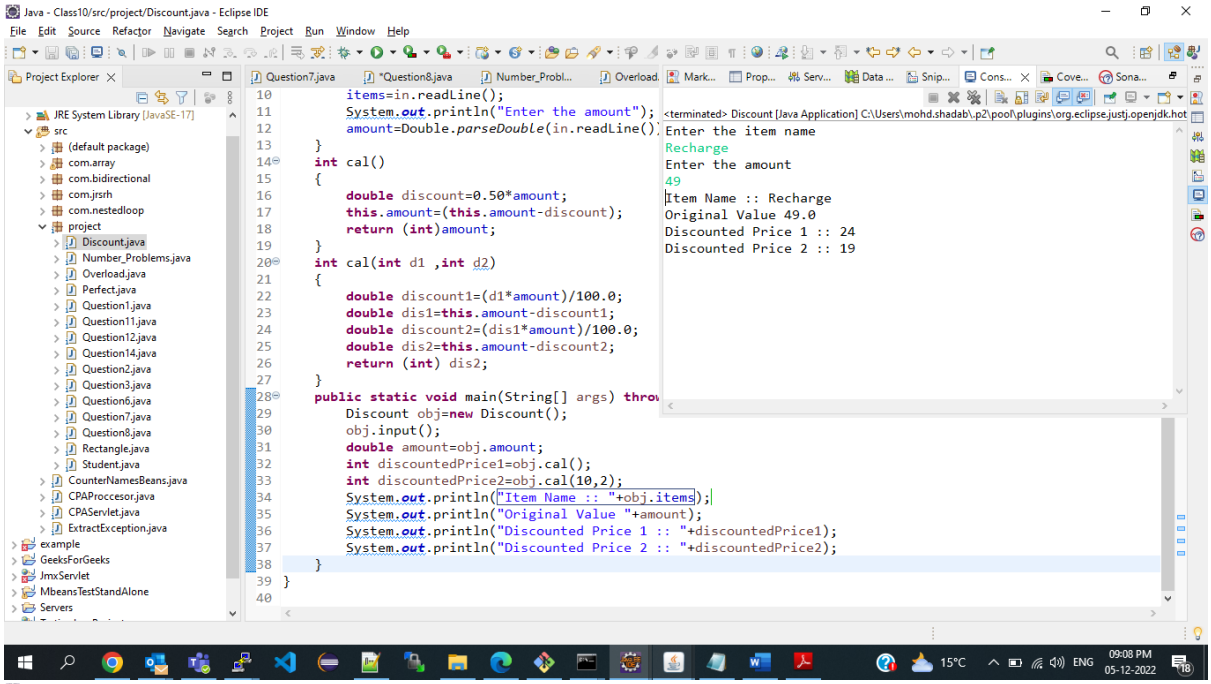


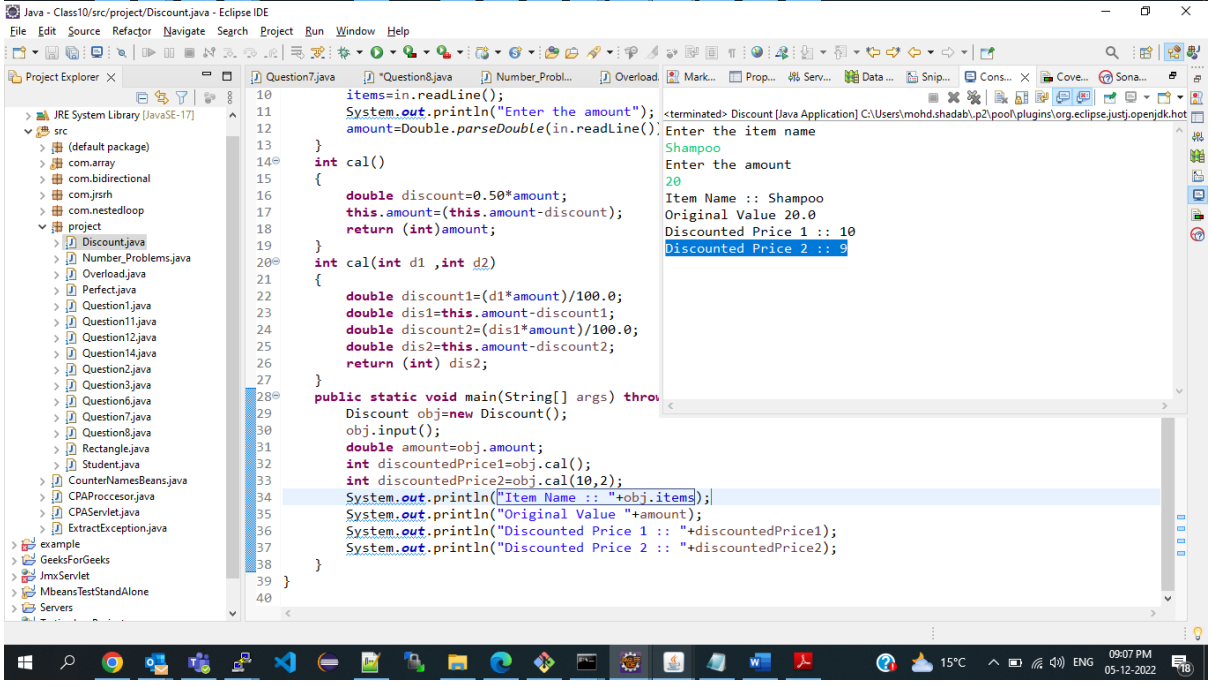


13. Design a class Discount to show the successive discount on the items purchased
Data members:
String items : to store the items purchased
double amount : to store the original bill amount
Member methods:
void input( ) : input the item and total amount of purchase
int cal( ) : apply 50% of discount on the total purchase amount and return the discounted price
int cal(int, int) : apply two successive discounts on the discounted price and return final discounted price
void display(int) : display the final discounted price along with the items purchased and original bill amount

```
package project;

import java.io.*;
public class Discount {
	String items;
	double amount;
	void input()throws IOException {
		BufferedReader in =new BufferedReader(new
InputStreamReader(System.in));
		System.out.println("Enter the item name");
		items=in.readLine();
		System.out.println("Enter the amount");
		amount=Double.parseDouble(in.readLine());
	}
	int cal()
	{
		double discount=0.50*amount;
		this.amount=(this.amount-discount);
		return (int)amount;
	}
	int cal(int d1 ,int d2)
	{
		double discount1=(d1*amount)/100.0;
		double dis1=this.amount-discount1;
		double discount2=(dis1*amount)/100.0;
		double dis2=this.amount-discount2;
		return (int) dis2;
	}
	public static void main(String[] args) throws IOException {
		Discount obj=new Discount();
		obj.input();
		double amount=obj.amount;
		int discountedPrice1=obj.cal();
		int discountedPrice2=obj.cal(10,2);
		System.out.println("Item Name :: "+obj.items);
		System.out.println("Original Value "+amount);
```

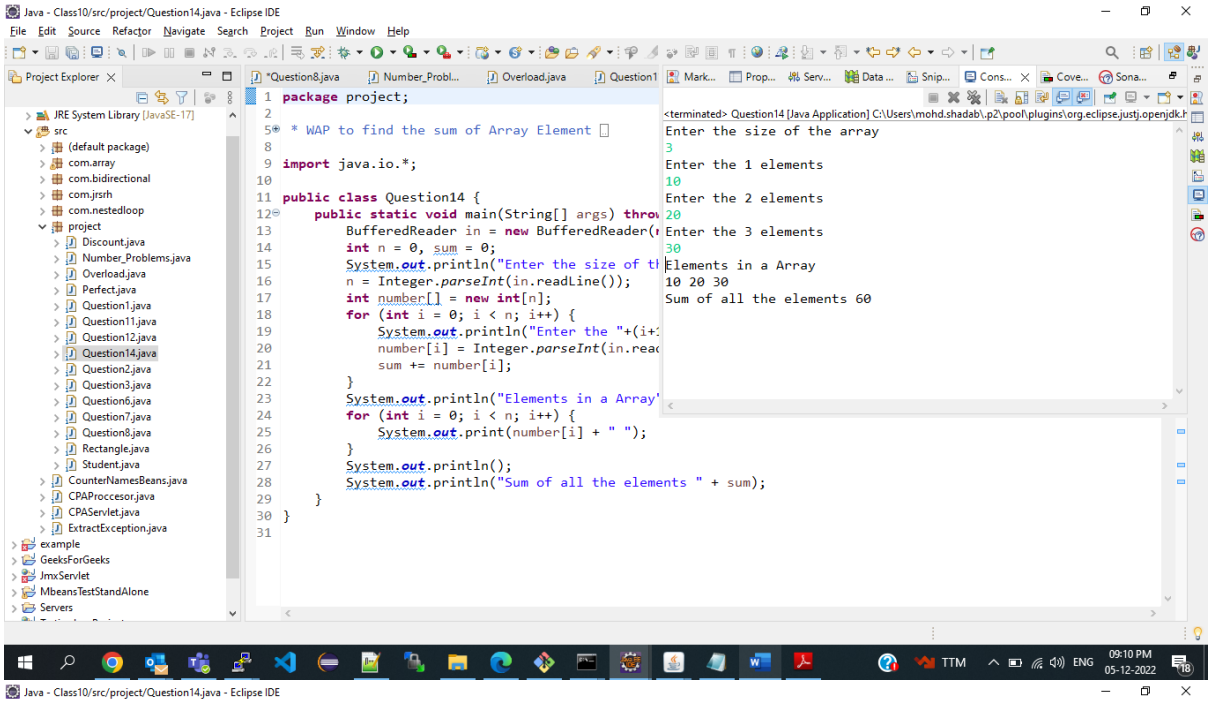
```
        System.out.println("Discounted Price 1 :: "+discountedPrice1);
        System.out.println("Discounted Price 2 :: "+discountedPrice2);
    }
}
```

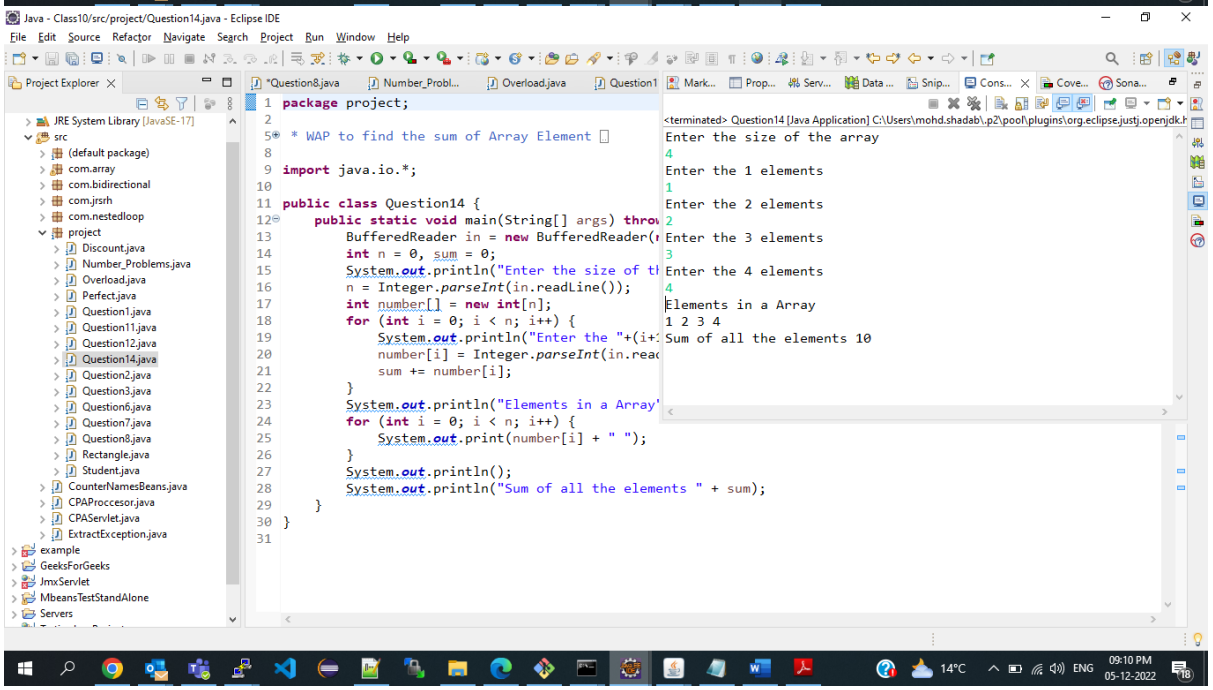




14. Write a program to input an array of size n and display the sum of all the numbers present in an array.

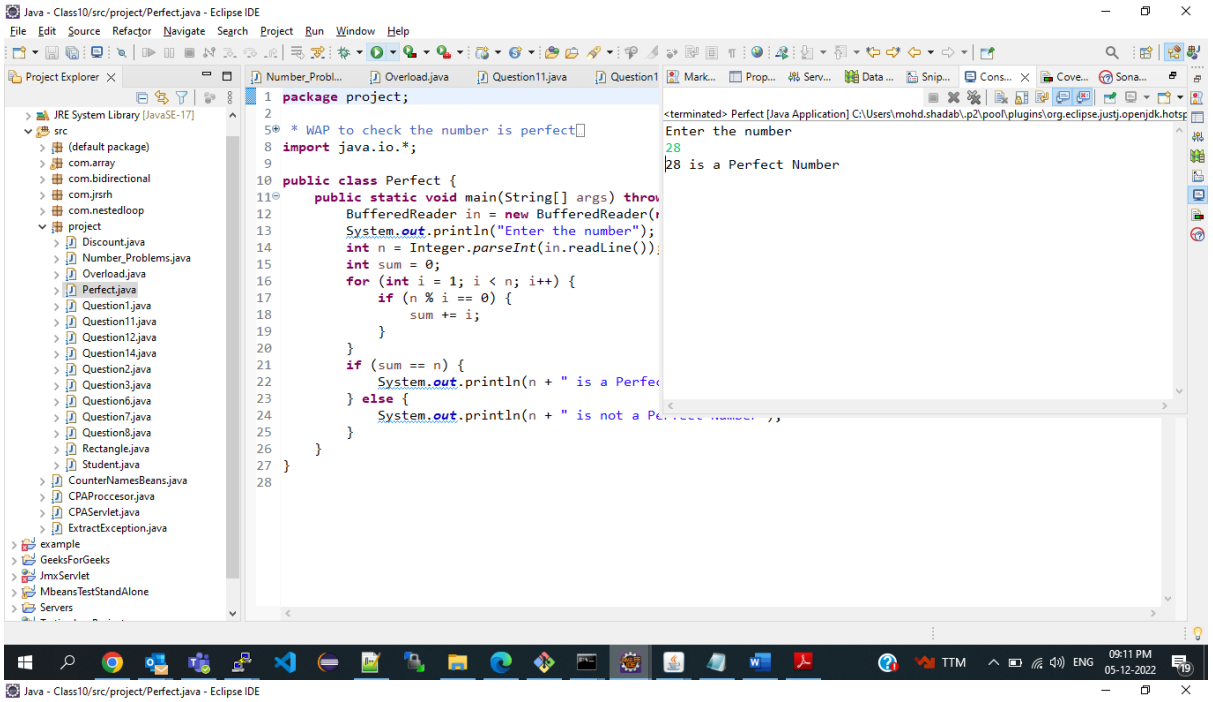
```
package project;


/**
 *
 * WAP to find the sum of Array Element
 *
 */


import java.io.*;


public class Question14 {
	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		int n = 0, sum = 0;
		System.out.println("Enter the size of the array");
		n = Integer.parseInt(in.readLine());
		int number[] = new int[n];
		for (int i = 0; i < n; i++) {
			System.out.println("Enter the "+(i+1)+" elements");
			number[i] = Integer.parseInt(in.readLine());
			sum += number[i];
		}
		System.out.println("Elements in a Array");
		for (int i = 0; i < n; i++) {
			System.out.print(number[i] + " ");
		}
		System.out.println();
		System.out.println("Sum of all the elements " + sum);
	}
}
```


Java - Class10/src/project/Question14.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
*Question8.java
Number_Probl...
Overload.java
Question1
Mark...
Prop...
Serv...
Data ...
Snip...
Cons...
Cove...
Sona...
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
1 package project;
2
5 * WAP to find the sum of Array Element
8
9 import java.io.*;
10
11 public class Question14 {
12 public static void main(String[] args) throw
13 BufferedReader in = new BufferedReader(
14 int n = 0, sum = 0;
15 System.out.println("Enter the size of t
16 n = Integer.parseInt(in.readLine());
17 int number[] = new int[n];
18 for (int i = 0; i < n; i++) {
19 System.out.println("Enter the "+(i+
20 number[i] = Integer.parseInt(in.rea
21 sum += number[i];
22 }
23 System.out.println("Elements in a Array'
24 for (int i = 0; i < n; i++) {
25 System.out.print(number[i] + " ");
26 }
27 System.out.println();
28 System.out.println("Sum of all the elements " + sum);
29 }
30 }
31
<terminated> Question14 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.h
Enter the size of the array
3
Enter the 1 elements
10
Enter the 2 elements
20
Enter the 3 elements
30
Elements in a Array
10 20 30
Sum of all the elements 60
TTM
ENG
09:10 PM
05-12-2022


Java - Class10/src/project/Question14.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
*Question8.java
Number_Probl...
Overload.java
Question1
Mark...
Prop...
Serv...
Data ...
Snip...
Cons...
Cove...
Sona...
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
Question11.java
Question12.java
Question14.java
Question2.java
Question3.java
Question6.java
Question7.java
Question8.java
Rectangle.java
Student.java
CounterNamesBeans.java
CPAProccesor.java
CPAServlet.java
ExtractException.java
example
GeeksForGeeks
JmxServlet
MbeansTestStandAlone
Servers
1 package project;
2
5 * WAP to find the sum of Array Element
8
9 import java.io.*;
10
11 public class Question14 {
12 public static void main(String[] args) throw
13 BufferedReader in = new BufferedReader(
14 int n = 0, sum = 0;
15 System.out.println("Enter the size of t
16 n = Integer.parseInt(in.readLine());
17 int number[] = new int[n];
18 for (int i = 0; i < n; i++) {
19 System.out.println("Enter the "+(i+
20 number[i] = Integer.parseInt(in.rea
21 sum += number[i];
22 }
23 System.out.println("Elements in a Array'
24 for (int i = 0; i < n; i++) {
25 System.out.print(number[i] + " ");
26 }
27 System.out.println();
28 System.out.println("Sum of all the elements " + sum);
29 }
30 }
31
<terminated> Question14 [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.h
Enter the size of the array
4
Enter the 1 elements
1
Enter the 2 elements
2
Enter the 3 elements
3
Enter the 4 elements
4
Elements in a Array
1 2 3 4
Sum of all the elements 10
14°C
ENG
09:10 PM
05-12-2022

15. N is a perfect number if the sum of all the factors of the number (excluding the number itself) is equal to the number itself. Design a class Perfect to input a number and check whether the number is Perfect or not. Display the appropriate messages.

```
package project;


/**
 *
 * WAP to check the number is perfect
 *
 */
import java.io.*;


public class Perfect {
	public static void main(String[] args) throws IOException {
		BufferedReader in = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Enter the number");
		int n = Integer.parseInt(in.readLine());
		int sum = 0;
		for (int i = 1; i < n; i++) {
			if (n % i == 0) {
				sum += i;
			}
		}
		if (sum == n) {
			System.out.println(n + " is a Perfect Number");
		} else {
			System.out.println(n + " is not a Perfect Number");
		}
	}
}
```


Java - Class10/src/project/Perfect.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Project Explorer
JRE System Library [JavaSE-17]
src
(default package)
com.array
com.bidirectional
com.jrsrh
com.nestedloop
project
Discount.java
Number_Problems.java
Overload.java
Perfect.java
Question1.java
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19 }
20 }
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22 System.out.println(n + " is a Perfe
23 } else {
24 System.out.println(n + " is not a Pe
25 }
26 }
27 }
28
<terminated> Perfect [Java Application] C:\Users\mohd.shadab\.p2\pool\plugins\org.eclipse.justj.openjdk.hotsp
Enter the number
28
28 is a Perfect Number
TTM
ENG
09:11 PM
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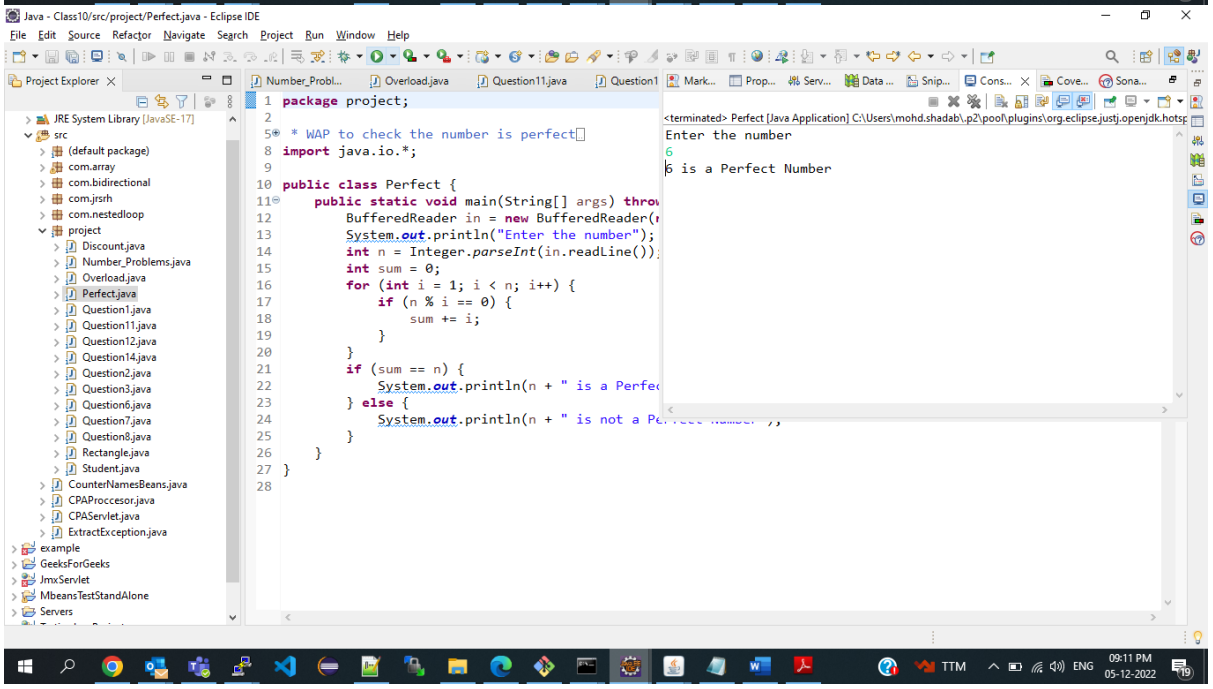
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