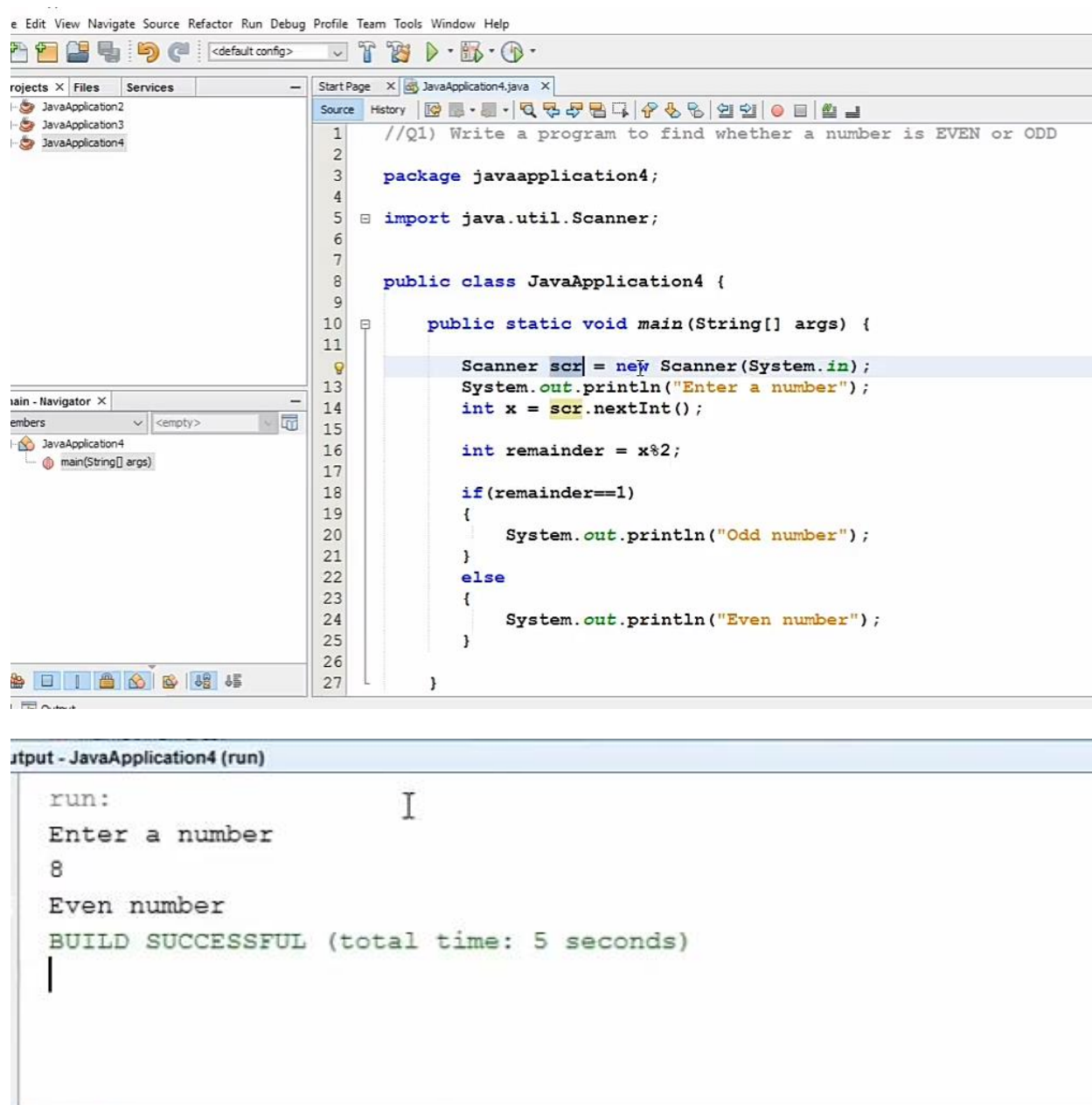




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Q no 1 : how to check even and odd number in java?



The image shows an IDE window with a Java source file named `JavaApplication4.java`. The code is as follows:

```
1 //Q1) Write a program to find whether a number is EVEN or ODD
2
3 package javaapplication4;
4
5 import java.util.Scanner;
6
7
8 public class JavaApplication4 {
9
10     public static void main(String[] args) {
11
12         Scanner scr = new Scanner(System.in);
13         System.out.println("Enter a number");
14         int x = scr.nextInt();
15
16         int remainder = x%2;
17
18         if(remainder==1)
19         {
20             System.out.println("Odd number");
21         }
22         else
23         {
24             System.out.println("Even number");
25         }
26
27     }
```

Below the code editor, the output window shows the execution results:

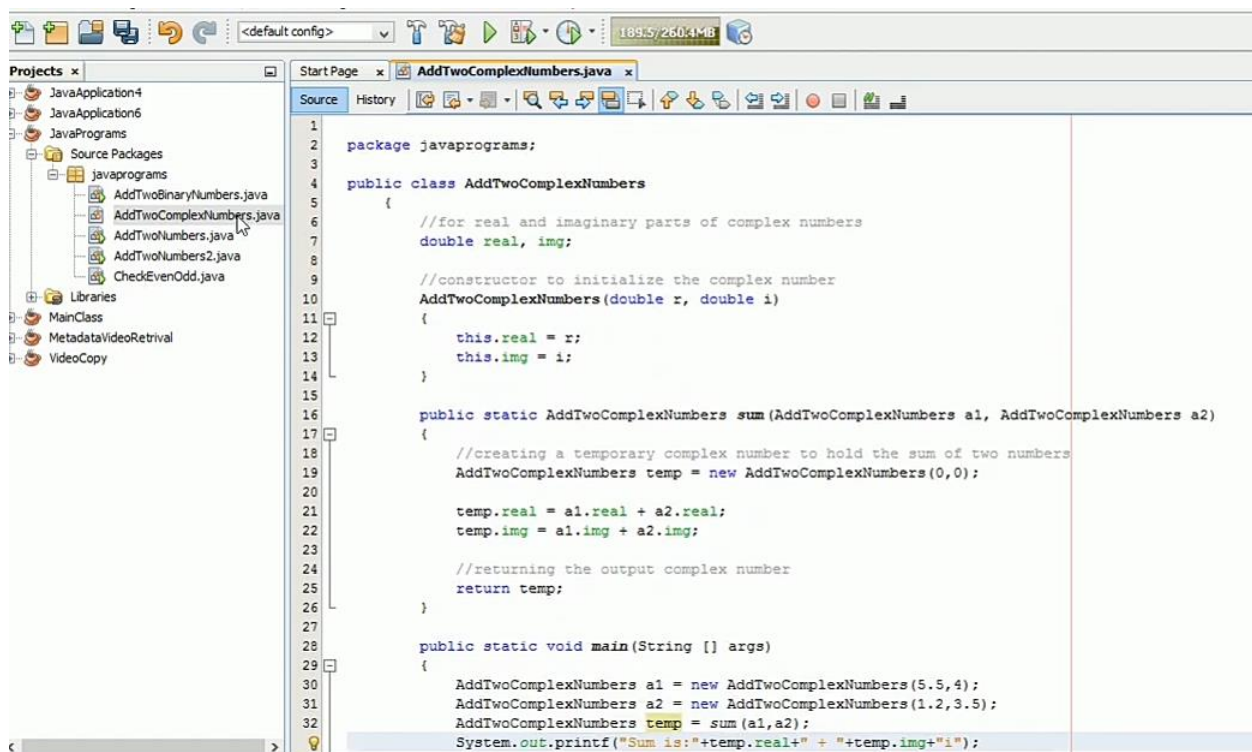
```
Output - JavaApplication4 (run)
run:
Enter a number
8
Even number
BUILD SUCCESSFUL (total time: 5 seconds)
```

```

Output - JavaApplication4 (run)
run:
Enter a number
5
Odd number
BUILD SUCCESSFUL (total time: 10 seconds)

```

Q no 2: how to add two complex number?



```

package javaprograms;

public class AddTwoComplexNumbers
{
    //for real and imaginary parts of complex numbers
    double real, img;

    //constructor to initialize the complex number
    AddTwoComplexNumbers(double r, double i)
    {
        this.real = r;
        this.img = i;
    }

    public static AddTwoComplexNumbers sum(AddTwoComplexNumbers a1, AddTwoComplexNumbers a2)
    {
        //creating a temporary complex number to hold the sum of two numbers
        AddTwoComplexNumbers temp = new AddTwoComplexNumbers(0,0);

        temp.real = a1.real + a2.real;
        temp.img = a1.img + a2.img;

        //returning the output complex number
        return temp;
    }

    public static void main(String [] args)
    {
        AddTwoComplexNumbers a1 = new AddTwoComplexNumbers(5.5,4);
        AddTwoComplexNumbers a2 = new AddTwoComplexNumbers(1.2,3.5);
        AddTwoComplexNumbers temp = sum(a1,a2);
        System.out.printf("Sum is:"+temp.real+" "+temp.img+"i");
    }
}

```

```

24 //returning the output complex number
25 return temp;
26 }

```

```

Output - JavaPrograms (run) x
run:
Sum is:6.7 + 7.5iBUILD SUCCESSFUL (total time: 3 seconds)

```

Q no 3: how to check leap year in java?

JavaApplication4 - NetBeans IDE 8.2

Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

objects Files Services JavaApplication4.java

```
3
4 package javaapplication4;
5
6
7 public class JavaApplication4 {
8
9     public static void main(String[] args) {
10
11         int year=2400;
12
13         if(year%400==0)
14         {
15             System.out.println("Leap year");
16         }
17         else if(year%4==0 && year%100!=0)
18         {
19             System.out.println("Leap year");
20         }
21         else
22         {
23             System.out.println("Not a Leap year");
24         }
25     }
26
27
28
29 }
```

ain - Navigator

members

JavaApplication4

main(String[] args)

Output

Output - JavaApplication4 (run)

```
run:
Leap year
BUILD SUCCESSFUL (total time: 1 second)
```

Output - JavaApplication4 (run)

```
run:
Not a Leap year
BUILD SUCCESSFUL (total time: 0 seconds)
```

Q no 4: how to check vowel or not in java?

```
even odd \src \even \company \Main
Main.java x
1 package even.company;
2 import java.util.Scanner;
3
4 public class Main {
5
6     public static void main(String[] args) {
7         char ch;
8         Scanner sc = new Scanner(System.in);
9         System.out.println("enter any character");
10        ch = sc.next().charAt(0);
11        if (ch=='A' || ch=='a' || ch=='E' || ch=='e' || ch=='I' || ch=='i' || ch=='O' || ch=='o' || ch=='U' || ch=='u' )
12        {
13            System.out.println("this is vowel");
14        }
15        else {
16            System.out.println("this is not vowel");
17        }
18    }
19 }
```

```
"C:\Program Files\Java\jdk-14.0.1\bin\ja
enter any character
o
this is vowel
Process finished with exit code 0
```

```
"C:\Program Files\Java\jdk-14.0.1\
enter any character
t
this is not vowel
Process finished with exit code 0
```