

Course outline

How does an NPTEL online course work?

Week 0 : Assignment 0

Week 1 :

Week 2 :

Week 3 :

Week 4 :

Week 5 :

Week 6 :

Week 7 :

Week 8 :

- Lecture 36 : Applet Programming—III
- Lecture 37 : Demonstration—XIII
- Lecture 38 : Demonstration—XIV
- Lecture 39 : AWT Programming—I
- Lecture 40 : AWT Programming—II
- Quiz: Assignment 8
- Java Week 8: Q1
- Java Week 8: Q2
- Java Week 8: Q3
- Java Week 8: Q4
- Java Week 8: Q5
- Feedback For Week 8

Week 9 :

Week 10 :

Week 11 :

Week 12 :

Solution

DOWNLOAD VIDEOS

Text Transcripts

Programming Test - (April 11 - 10AM - 12 PM)

Programming Test - (April 11 - 8PM - 10 PM)

Java Week 8: Q5

Due on 2020-11-12, 23:59 IST

Write a program to **display any digit(n) from 0-9 represented as a "7 segment display"**.

For example:

input : 5

output :

```

_
|
_

```

input : 4

output :

```

_|
|

```

Private Test cases used for evaluation

Test Case 1

Input

Expected Output

Actual Output

Status

5	<pre> _ \n _ \n _ \n </pre>	<pre> _ \n _ \n _ \n </pre>	Passed
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The due date for submitting this assignment has passed.

1 out of 1 tests passed.

You scored 100.0/100.

Assignment submitted on 2020-11-06, 00:30 IST

Your last recorded submission was :

```

1 import java.util.*;
2
3 public class Pattern5 {
4
5     private static final Map<Integer, Integer> encodings =
6         new HashMap<Integer, Integer>();
7
8     static {
9         encodings.put(0, 0x7E);
10        encodings.put(1, 0x30);
11        encodings.put(2, 0x6D);
12        encodings.put(3, 0x79);
13        encodings.put(4, 0x33);
14        encodings.put(5, 0x5B);
15        encodings.put(6, 0x5F);
16        encodings.put(7, 0x70);
17        encodings.put(8, 0x7F);
18        encodings.put(9, 0x7B);
19    }
20
21    public static void printDigit(int digit) {
22        int code = encode(digit);
23        char[] bits =
24            String.format("%7s", Integer.toBinaryString(code))
25                .replace(' ', '0').toCharArray();
26
27        lightSegment(bits[0] == '1', " |", " \n", " \n");
28        lightSegment(bits[5] == '1', " _", " ", " ");
29        lightSegment(bits[6] == '1', " _", " ", " ");
30        lightSegment(bits[1] == '1', "T\n", " \n");
31        lightSegment(bits[4] == '1', " _", " ", " ");
32        lightSegment(bits[3] == '1', " _", " ", " ");
33        lightSegment(bits[2] == '1', "T\n", " \n");
34    }
35
36    private static void lightSegment(boolean on, String onValue, String offValue) {
37        System.out.print(on ? onValue : offValue);
38        try {
39            Thread.sleep(0);
40        }
41        catch (InterruptedException e) {
42            e.printStackTrace();
43        }
44    }
45
46    private static int encode(int digit) {
47        return encodings.containsKey(digit) ? encodings.get(digit) : 0x00;
48    }
49
50    public static void main(String[] args) throws Exception {
51        Scanner inr = new Scanner(System.in);
52        int n = inr.nextInt();
53        printDigit(n);
54    }
55 }
56

```

Sample solutions (Provided by instructor)

```

1 import java.util.*;
2 public class Pattern5 {
3     private static final Map<Integer, Integer> encodings =
4         new HashMap<Integer, Integer>();
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48    public static void main(String[] args) throws Exception {
49        Scanner inr = new Scanner(System.in);
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