



# HINDUSTHAN INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

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Valley Campus, Pollachi Main Road, Coimbatore 641 032.



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### Innovations in Teaching Learning Process

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Subject code & Title	22CS302 – JAVA PROGRAMMING
Academic year & Semester	2023-2024 & III

#### 1. Crossword Puzzles:

Crossword puzzles can be valuable tools in the learning process to assess Critical Thinking and to enhance recalling important keywords, concepts and also it helps in deep understanding of subject. Also the enjoyable nature of crossword puzzles can serve as a stress-relief activity.

In Java Programming, crossword puzzles were created for each unit. Each puzzle has 15 to 20 questions. The questions may be definitions, syntax, output of a code snippet and real time examples. It helps to identify the area where the student has difficulty in understanding, so that the more clarification.

22CS302 - Java Programming  
Date:

Reg No:  
Name:

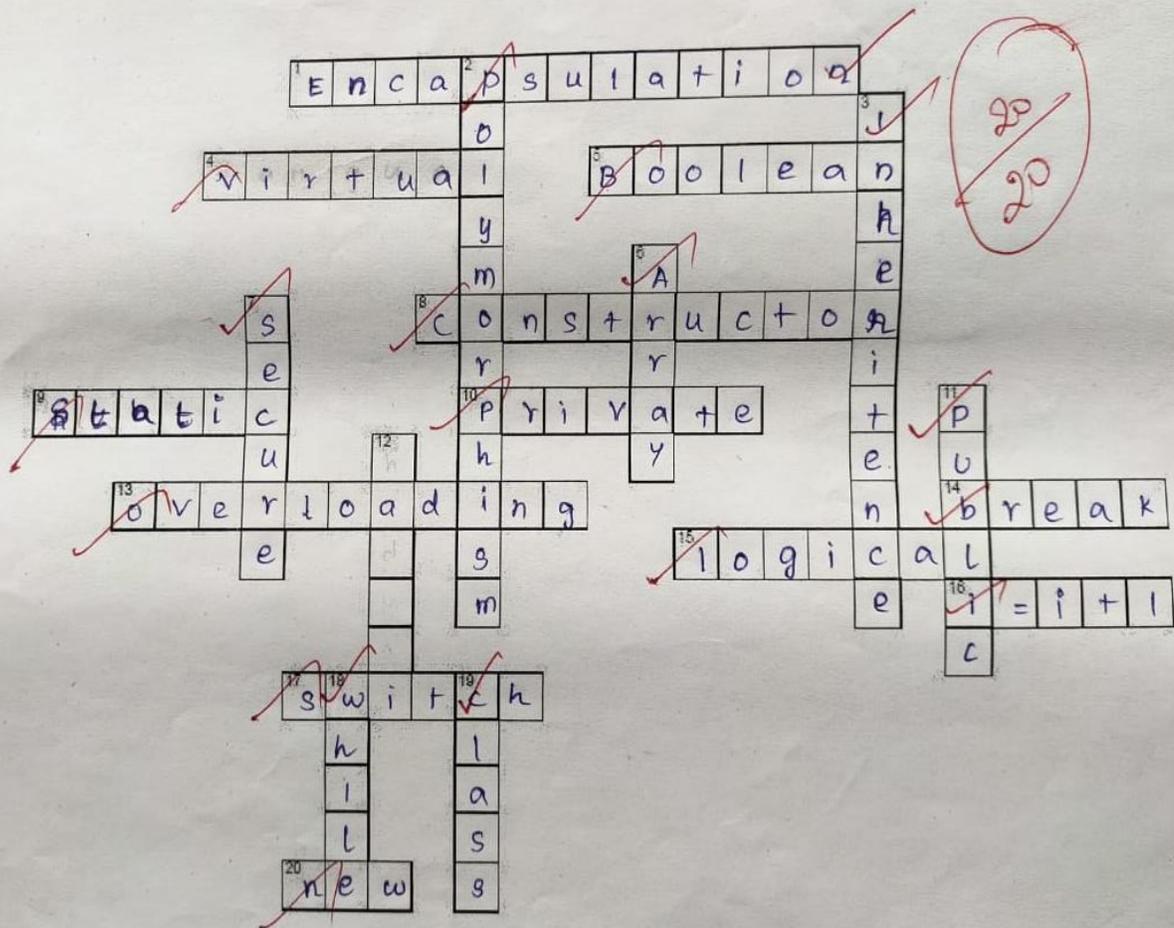
#### ACROSS

- 1 - Combining data and members together
- 4 - Java \_\_\_\_\_ Machine
- 5 - True, False - A data type
- 8 - Used to allocate memory while creating objects
- 9 - Common to all instance of the class
- 10 - Access Specifier - Restricts the Accessibility of methods by others
- 13 - Multiple Methods having same name but different Signature
- 14 - Get out of the loop
- 15 - Operator used while dealing with multiple conditions
- 16 - Add 1 to i and store in i
- 17 - Multiway Branching Statement
- 20 - Operator to create object of a class

#### DOWN

- 2 - Same object behaving differently in different situation
- 3 - Increases Reusability
- 6 - Collection of data of similar type
- 7 - one of the properties of Java
- 11 - Can be seen by any class
- 12 - Object of class "Car"
- 18 - Iterative structure used when the number of times execution is based on the input
- 19 - Blueprint of object

## Java Basics



## 2. Online Coding Platform:

Practice in online coding platform provides a structured environment for beginners to learn programming languages. It is also used to enhance the skills and it provides many challenges to help students to enhance their problem solving abilities. It also helps to prepare for technical interviews. HackerRank is a programming practice platform that provides competitive challenges and tests for learning skills and preparing for technology careers.

To give students, programming practice, contests have been created in Hackerrank platform and they were guided to complete the contests if needed.

## Java Assignment I

### Challenges

Current Rank: N/A

- Java If-Else**  
Success Rate: 88.70% Max Score: 10 Difficulty: Easy [Solve Challenge](#)
- Java Loops I**  
Success Rate: 93.91% Max Score: 10 Difficulty: Easy [Solve Challenge](#)
- Java Loops II**  
Success Rate: 97.35% Max Score: 10 Difficulty: Easy [Solve Challenge](#)
- Java Static Initializer Block**

- Current Leaderboard
- Compare Progress
- Review Submissions

- Admin Options
- Manage Contest
- View All Submissions

Message Center

Rank	User	Score	Time	Country
1	h720822103124	100.00	1686:50:10	
1	h720822103112	100.00	1691:47:02	
1	h720822103098	100.00	1693:19:04	
1	h720822103071	100.00	1716:22:24	
1	h720822103122	100.00	1716:39:04	
1	h720822103092	100.00	1738:50:23	
1	h720822103120	100.00	1759:45:30	
1	h720822103100	100.00	1876:21:57	
1	h720822103084	100.00	1904:06:44	

```
import java.io.*;
import java.math.*;
import java.security.*;
import java.text.*;
import java.util.*;
import java.util.concurrent.*;
import java.util.regex.*;

public class Solution {

    private static final Scanner scanner = new Scanner(System.in);

    public static void main(String[] args) {
        int n = scanner.nextInt();
        scanner.skip("(\\r\\n|[\\n\\r\\u2028\\u2029\\u0085])?");
        if (n % 2 != 0)
        {
            System.out.println("Weird");
        } else if (n % 2 == 0 && n >= 2 && n <= 4) {
            System.out.println("Not Weird");
        } else if (n % 2 == 0 && n >= 6 && n <= 20) {
            System.out.println("Weird");
        } else if (n % 2==0 && n>20) {
            System.out.println("Not Weird");
        }
        scanner.close();
    }
}
```

```
import java.util.Scanner;

public class main{

    public static void main(String arg[]){

        Scanner Scanner=new Scanner (System.in);

        int n =Scanner.nextInt();

        Scanner.close();

        if(n%2==1){

            System.out.println("Weird");

        } else {

            if(n>=2&& n<=5){

                System.out.println("Not Weird");

            } else if (n>=6&& n<=20){

                System.out.println("Weird");

            } else {

                System.out.println("Not Weird");

            }

        }

    }

}
```

### 3. Project Based Learning:

Project Based Learning actively engages students in their learning process by presenting them with real-world problems or challenges to solve. This hands-on approach captures students' interest and motivates them to explore and understand the subject matter more deeply.

Based on this aspect, teams were formed among the students and are assigned with a mini project. Students involved very actively in project work. Periodic reviews were conducted and guidance was given for the completion of the project.





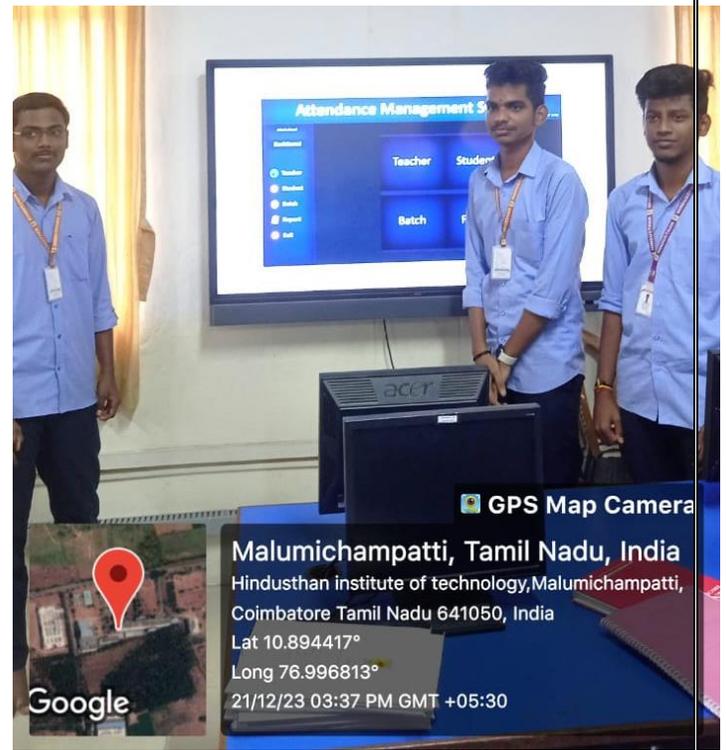
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