**Ex. No.:1.1 Date:**

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| **Salary Calculation** |
| **Problem Statement:**  You are required to write a Java program to calculate the total salary of an employee based on their hourly wage, hours worked in a week, and the number of weeks they worked. The program should consider the following rules:  - If an employee works more than 40 hours in a week, they are paid 1.5 times their hourly wage for the overtime hours.  - If an employee works less than 20 hours in a week, they are penalized with a deduction of 10% of their weekly salary.  - The program should handle invalid inputs (e.g., negative values for hours or wages).  **Input Format:**  - Hourly wage (a positive decimal value).  - Number of hours worked per week (a positive integer).  - Number of weeks worked (a positive integer).  **Output Format:**  Total salary considering the overtime pay and penalty rules.  **SAMPLE INPUT**  15.0  45  4  **SAMPLE OUTPUT**  Total salary is 2850.0 |

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| **Program:**  **import java.util.\*;**  **class salary{**  **public static void main(String[] args)**  **{**  **double hourlypay,totalpay=0,t,overtime,d;**  **int workingtime,weeks;**  **Scanner o=new Scanner(System.in);**  **hourlypay=o.nextDouble();**  **workingtime=o.nextInt();**  **weeks=o.nextInt();**  **if(workingtime>40 && hourlypay>0)**  **{**  **t=hourlypay\*40\*weeks;**  **overtime=(hourlypay\*1.5)\*((workingtime-40)\*weeks);**  **totalpay=t+overtime;**  **}**  **else if(workingtime>0 && workingtime<20 && hourlypay>0)**  **{**  **t=hourlypay\*workingtime\*weeks;**  **d=t\*(20/100);**  **totalpay=t-d;**  **}**  **else{**  **System.out.println("Invalid input");**  **}**  **System.out.println("Total salary is :" + totalpay);**  **}**  **}** |