

CS2304 JAVA PROGRAMMING

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Week 1 PRIMITIVE DATA TYPE PRACTICE QUESTION

1. Write a program that reads two numbers (int or double) and an operator (char) as input. Performs the calculation (+, -, *, /) and prints the result.
Note: Use if to apply the operator. character input : `sc.next().charAt(0)`

2. Write a program that stores team runs/points (int), fouls (byte or short), and win status (boolean). The program should set the win status to true only if runs are ≥ 50 and fouls are ≤ 5 ; otherwise, win status is false. Print all the stored values.

Note : use && (logical And operator)

3. Write a program that takes weight (kg) and height (meters) as double inputs. Store the status as boolean indicating if the BMI is Normal ($18.5 \leq \text{BMI} < 25$). Print the BMI and the corresponding status.

Hint: $\text{BMI} = \text{weight} / (\text{height} * \text{height})$

4. Write a program that takes marks of three subjects (int or float). Calculate total and average. Assign a grade (char) based on the average (Set Grade as U if any of the subject is less than 50). Store the pass status as a boolean (true all three subject marks are above and equal to 50; otherwise, it should be false.). Print total, average, grade, and pass status.

Hint: Use conditions to assign grades (e.g., S for $\text{avg} \geq 90$). use || (logical OR operator) / && (logical And operator))

5. Write a program that reads temperature in Celsius (double or short). Convert it to Fahrenheit and store a boolean indicating if the temperature is considered hot (Fahrenheit > 100). Print the temperature in both Celsius and Fahrenheit formats (Temperature: 38°C (102°F)) and the boolean status. **Hint :** $\text{Fahrenheit} = (\text{Celsius} * 9/5) + 32$