INTERNET BASED PROGRAMMING – 29TH APRIL 2025.

JavaScript Conditional Logic – Student Questions.

1. Capturing Student Marks and Grading

Question:

Create a JavaScript program that asks a user to enter marks for 3 subjects using `prompt()`.

- Calculate the **total** and **average**.
- Display the **grade** using an `alert()` box.

Grading Criteria:

- `Average ≥ 70`: Grade A
- `Average ≥ 60`: Grade B
- `Average ≥ 50`: Grade C
- `Average ≥ 40`: Grade D
- `Below 40`: Grade E

2. Salary and SHA Deductions

Question:

Ask the user to enter their **monthly salary** using `prompt()`.

- Calculate **SHA deduction** at 5% of the salary.
- Use conditional statements to classify the person:
  - Salary $\geq$ 100,000: "Rich"
  - Salary between 50,000–99,999: "Middle Class"
  - Below 50,000: "Poor"

Display the result in an `alert()` box showing:

- Gross Salary
- SHA Deduction
- Net Salary
- Category (Rich, Middle Class, Poor)

Expected Skills Tested:

- Prompt input
- Arithmetic operations
- `if`, `else if`, `else` usage

- Alert box display formatting

3. BMI (Body Mass Index) Calculator

Question:

Create a JavaScript program that:

- Asks for the user's **weight in kg** and **height in meters**.
- Calculates BMI using the formula:

```
BMI = weight / (height * height);
```

- Based on the BMI value, give a classification using `if-else if`:

Classification:

- BMI < 18.5: "Underweight"
- BMI 18.5 to 24.9: "Normal weight"
- BMI 25 to 29.9: "Overweight"
- BMI ≥ 30: "Obese"

Display a message using an `alert()` box with:

- BMI value and health category.