Perfect 👍 below are **clear, correct, exam-oriented JavaScript programs** for **all 7 questions**, written exactly how LPU expects (with explanation + code). You can write these directly in exams.

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1. Display current date, month, year and day of the week of the machine

JavaScript provides the built-in Date object to get the current system date and time.

JavaScript Code:

```
<script>
  var today = new Date();

  var day = today.getDay();
  var date = today.getDate();
  var month = today.getMonth() + 1; // months start from 0
  var year = today.getFullYear();

  var days = ["Sunday","Monday","Tuesday","Wednesday","Thursday","Friday","Saturday"];

  document.write("Day: " + days[day] + "<br>");
  document.write("Date: " + date + "<br>");
  document.write("Month: " + month + "<br>");
  document.write("Year: " + year);
</script>
```

Explanation:

- getDay() → returns day index (0–6)
- getDate() → current date
- getMonth() → month (0–11)
- getFullYear() → current year

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2. Display current day of week using if-else condition

This program checks the day and prints a special message if today is **Friday**.

JavaScript Code:

```
<script>
  var today = new Date();
```

```
  var day = today.getDay();


  if (day == 5) {
    document.write("Hello Everyone Today is Friday, Starting of a weekend");
  } else {
    document.write("Hello Everyone Today is not Friday");
  }
</script>
```

Explanation:

- 5 represents Friday
- if–else checks the condition and prints output accordingly

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3. Write a JavaScript program that accepts two integers and displays the larger one

JavaScript Code:

```
<script>
  var a = parseInt(prompt("Enter first number:"));
  var b = parseInt(prompt("Enter second number:"));


  if (a > b) {
    document.write(a + " is larger");
  } else if (b > a) {
    document.write(b + " is larger");
  } else {
    document.write("Both numbers are equal");
  }
</script>
```

Explanation:

- prompt() takes input from user
- parseInt() converts string to integer
- Conditional statements compare values

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4. Write a JavaScript conditional statement to find the largest of five numbers (using alert)

JavaScript Code:

```
<script>
  var a = 10, b = 25, c = 15, d = 30, e = 20;
  var largest;

  if (a > b && a > c && a > d && a > e)
    largest = a;
  else if (b > c && b > d && b > e)
    largest = b;
  else if (c > d && c > e)
    largest = c;
  else if (d > e)
    largest = d;
  else
    largest = e;

  alert("Largest number is: " + largest);
</script>
```

Explanation:

- Logical operators (&&) are used
- alert() displays result in popup

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5. Write a JavaScript program to find Armstrong numbers of 3 digits

An **Armstrong number** is a number where the sum of the cubes of its digits equals the number itself.

JavaScript Code:

```
<script>
  for (var i = 100; i <= 999; i++) {
    var num = i;
    var sum = 0;
```

```
  while (num > 0) {
    var digit = num % 10;
    sum += digit * digit * digit;
    num = parseInt(num / 10);
  }

  if (sum == i) {
    document.write(i + "<br>");
  }
 }
</script>
```

Explanation:

- Loop checks numbers from 100 to 999
- Extracts digits using %
- Compares cube sum with original number

Example output:

153

370

371

407

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6. Write a JavaScript program to compute the GCD of two positive integers

JavaScript Code:

```
<script>
 var a = parseInt(prompt("Enter first number:"));
 var b = parseInt(prompt("Enter second number:"));

 while (b != 0) {
  var temp = b;
  b = a % b;
  a = temp;
 }
```

```
  document.write("GCD is: " + a);
</script>
```

Explanation:

- Uses **Euclidean Algorithm**
- Repeats until remainder becomes zero
- Efficient and widely used

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7. Using a for loop output the elements in reverse order

JavaScript Code:

```
<script>
  var arr = [10, 20, 30, 40, 50];

  for (var i = arr.length - 1; i >= 0; i--) {
    document.write(arr[i] + " ");
  }
</script>
```

Explanation:

- arr.length - 1 gives last index
- Loop runs backwards
- Prints elements in reverse order
