

## Assignment : Javascript Conditions

**Q1. What are conditional statements? Explain conditional statements with syntax and examples.**

Ans)

Conditional statements are used to perform different actions based on different conditions. They allow the program to make decisions and execute specific blocks of code accordingly.

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**Q2. Write a program that grades students based on their marks.**

- If greater than 90 then A Grade
- If between 70 and 90 then a B grade
- If between 50 and 70 then a C grade
- Below 50 then an F grade

Ans) **Javascript code** - [link](#)

**Q3. What are loops, and what do we need them? Explain different types of loops with their syntax and examples.**

Ans)

Loops are used to execute a block of code multiple times, as long as a certain condition is true. They help avoid repeating code manually and are essential for tasks like iterating over arrays, repeating actions.

1. **For Loop** - Used when the number of iterations are known.

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2. **While Loop** - Used when the number of iterations are not known and the loop is required to run until a certain condition is false.

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3. **Do-while Loop** - Like while, but it executes at least once, even if the condition is false the first time.

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4. **For-of Loop** - Used to iterate over iterable objects like arrays or strings.

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5. **For-in Loop** - Used to iterate over the properties of an object.

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**Q4. Generate numbers between any 2 given numbers.**

**Ex:**

- `const num1 = 10;`
- `const num2 = 25;`

**Output:** 11, 12, 13, ..., 25

Ans) **Javascript code** - [link](#)

**Q5. Use the while loop to print numbers from 1 to 25 in ascending and descending order.**

Ans) **Javascript code** - [link](#)