

# JS TASK USING || (OR) AND && (AND)

## Question 1: Voting Eligibility

**\*\*Scenario:** Determine if a person is eligible to vote.

### Inputs:

- `age`
- `citizenship` (boolean)

### **\*\*Outputs:**

- `canVote`

### **\*Algorithm:\***

1. Check if the age of the person is 18 or older
2. Check if the person has citizenship.
3. If both conditions are true, print canVote Otherwise, print can not vote.

### **\*\*Example:**

Input: `age =20`, `citizenship= true`

Output: `canVote`

### Answer:

```
var age = 17;
var citizenship = true;

if (age>=18 && citizenship ){
    console.log("canVote")
}else{
    console.log("can not vote")
}
```

## Question 2: Admission to a Club

\*Scenario: Determine if a person can enter a club.

### **\*\*Inputs:**

- `age`
- `hasInvitation` (boolean)

### **\*\*Outputs:**

- `canEnterClub`

### **\*\*Algorithm:**

1. Check if the age of the person is 21 or older.
2. Check if the person has an Invitation
3. If either condition is true, print `canEnterClub`.
4. otherwise, print `canNotEnterClub`.

### **\*\*Example:**

**Input:** `age= 20`, `hasInvitation= true`

**Output:** canEnterClub

### **Answer:**

```
var age = 20;
var hasInvitation = true;

if (age > 20 || hasInvitation) {
    console.log("canEnterClub")
} else {
    console.log("canNotEnterClub")
}
```

### Question 3: Discount Eligibility

**\*\*Scenario:** Determine if a person is eligible for a discount at a store.

**Inputs:**

- `isMember` (boolean)
- `age`

**\*\*Outputs:**

- isEligibleForDiscount

**\*\*Algorithm:**

1. Check if the person is a member
2. Check if the person is a senior ( 65 years old or older )
- 3.If either condition is true, print `isEligibleForDiscount`.
4. Otherwise, set `isNotEligibleForDiscount`.

**\*Example:\***

**Input:**

`isMember= false`;

`age= 70`

**Output:** `isEligibleForDiscount`

**Answer:**

```
var age = 70;
var isMember = true

if (age <= 65 || isMember) {
    console.log("isElegibleForDiscount")
} else {
    console.log("isNotEligibleForDiscount")
}
```

## Question 4: Scholarship Eligibility

**\*\* Scenario:** Determine if a student is eligible for a scholarship.

### Inputs:

- `gpa`
- `extracurriculars` (boolean)
- `recommendation` (boolean)

### \*Outputs:\*

- `isEligibleForScholarship` (boolean)

### Algorithm:\*\*

1. Check if the GPA of the student is 3.5 or higher.
2. Check if the student participates in extracurricular activities.
3. Check if the student has a recommendation letter.
4. If the GPA is 3.5 or higher AND either participation in extracurricular activities or a recommendation letter is true, print `isEligibleForScholarship`.
5. Otherwise, set `isNotEligibleForScholarship`

### \*Example:\*

**Input:** `gpa= 3.6`; `extracurriculars= true`; `recommendation=false`

**Output:** `isEligibleForScholarship`

### Answer:

```
var gpa =3.6;
var extracurriculars = true;
var recommendation = false;

if(gpa>=3.5 && extracurriculars || recommendation){
    console.log("isEligibleForScholarship")
}else{
    console.log("isNotEligibleForScholarship")
}
```