

```

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`.
4. Otherwise, print `can not Vote`.

**Example:**
- Input: `age = 20`, `citizenship = true`
- Output: `canVote`

### 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`

### 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`

### 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`

```

1.

```
//-----1-----  
  
var age=20  
is_Citizenship=true  
if(age>=18 && is_Citizenship==true){  
    console.log("canvote ");  
}  
else{  
    console.log("cannot vote");  
}  
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS D:\10k\HTML\js> node logical.js  
canvote  
PS D:\10k\HTML\js> 
```

2.

```
//-----2-----  
  
var age=20  
hasInvitation=true  
if(age>=21 || hasInvitation==true){  
    console.log("canEnterClub");  
}  
else{  
    console.log("canNotEnterClub");  
}  
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS D:\10k\HTML\js> node logical.js  
canEnterClub  
PS D:\10k\HTML\js> 
```

3.

```
//-----3-----  
  
var isMember=true  
age=70  
if(age>=60 || isMember==false){  
    console.log("isEligibleForDiscount");  
}  
else{  
    console.log("isNotEligibleForDiscount");  
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS D:\10k\HTML\js> node logical.js  
isEligibleForDiscount  
PS D:\10k\HTML\js>
```

4.

```
//-----4-----  
  
var gpa=3.6  
extracurricular=true  
recommendation=true  
if(gpa>=3.5 && extracurricular==true || recommendation==false ){  
    console.log("isEligibleForScholarship");  
}  
else{  
    console.log("isNotEligibleForScholarship");  
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS D:\10k\HTML\js> node logical.js  
isEligibleForScholarship  
PS D:\10k\HTML\js>
```