

ASSIGNMENT 9

1.Voting Eligibility

Determinr if a person is eligible to vote.

Input:

age=20

citizenship=true

Code:

```
var age=20
var citizenship=true
if(age>=18 && citizenship){
  console.log('canVote')
}
else{
  console.log('can not Vote')
}
```

Output: canVote

Explanation:

- var age=20; sets the variable age to 20.
- var citizenship=true; sets the variable citizenship to true.
- The if statement checks if age is greater than or equal to 28 and if citizenship is true.
- Since age is 20, which is greater than 18, and citizenship is true, the condition age>=18 && citizenship is true.
- Therefore, the output is 'canVote'

2.Admission to a Club

Determine if a person can enter a club.

Input:

age=20

hasInvitation=true

Code:

```
var age = 20
var hasInvitation=true
if(age>=21 || hasInvitation){
  console.log('canEnterClub')
}
else{
  console.log('canNotEnterClub')
}
```

Output: canEnterClub

Explanation:

- var age=20; sets the age variable to 20.
- var hasInvitation=true; sets the hasInvitation variable to true.
- The if statement checks if age is greater than or equal to 21 or if hasInvitation is true.
- Since hasInvitation is true, the condition age>=21 || hasInvitation is true.
- Therefore, the output is 'canEnterClub'.

3.Discount Eligibility

Determine if a person is eligible for a discount at a store.

Input:

isMember=false

age=70

Code:

```
var age=70
var isMember=false
if(isMember || age>=65){
  console.log("isEligibleForDiscount")
}
else{
  console.log("isNotEligibleForDiscount")
}
```

Output: isEligibleForDiscount

Explanation:

- var age=70; sets the variable to 70.
- var isMember=false; sets the variable isMember to false.
- The if statement checks if isMember is true or if age is greater than or equal to 65.
- Since age is 70, which is greater than 65, the condition isMember || age>=65 is true.
- Therefore, the output is 'isEligibleForDiscount'.

4.Scholarship Eligibility

Determine if a student is eligible for a scholarship.

Input:

gpa=3.6

extracurriculars=true

recommendation=false

Code:

```
var gpa=3
var extracurriculars=true
```

```
var recommendation=false
if(gpa>=3.6 && (recommendation || extracurriculars)){
  console.log('isEligibleForScholorship')
}
else{
  console.log('isnotEligibleForeScholorship')
}
```

Output: isEligibleForScholorship

Explanation:

- var gpa=3.6; sets the gpa variable to 3.6.
- var extracurriculars=true; sets the extracurriculars variable to true.
- var recommendation =false; sets the recommendation variable to false.

The if statement checks two conditions combines with logical operators:

- gpa>=3.6 checks if gpa is greater than or equal to 3.6. This is true.
- (recommendation||extracurriculars) checks if either recommendation is true or extracurriculars is true.

Since extracurriculars is true, the combines condition (recommendation||extracurriculars) is true.

Therefor , the overall condition gpa>=3.6 && (recommendation||extracurriculars) is true, so console.log('isEligibleForScholorship'); is executed.