

Java Script conditional statements (Decision Making)

1. Determine the output displayed in the following programs.

- i)

```
let age = 15;
if(age = 18){
  alert("You are eligible to vote");
}
```
- ii)

```
let age = 15;
if(age ==18){
  alert("You are eligible to vote");
}else{
  alert("You are not-eligible to vote");
}
```
- iii)

```
let num = 15;
if(num<= 18){
  alert("number is less than 20");
}else if( num ==15){
  alert("number is equal to 15");
}
```
- iv)

```
let gpa = 8.5;
if(gpa>= 4){
  alert("Grade: D");
}else if(gpa>= 6){
  alert("Grade: C");
}elseif(gpa>= 8){
  alert("Grade:B ");
}elseif(gpa>= 9){
  alert("Grade: A");
}
```
- v)

```
var a = 5;
var b = 3;
var c = 20;

if (a * b <c){
  c =a;
}else{
  c = a+b+c;
}
```

```
alert(c);
```

vi) `var a = 4;`

```
if ((a <= 6) && (a < 2 || a <7 )){  
    alert("Hello!");  
}
```

2. What is wrong with the following code segments?

i) `if (x >0)|| (y >0){
 alert("At least one number is positive\n");
}`

ii) `let age = 15;
if(age == 18)
 alert("You are eligible to vote");
else
 alert("You are not-eligible to vote");`

iii) `let num = 15;
if(num<= 18){
 alert("number is less than 20");
}elseif(num ==15){
 alert("number is equal to 15");
}`

iv) `let x = 15;
if (x > 20 & x <= 40){
 alert(" x is valid");
}`

v) `let a = 10;
if (a > 5);
{
 alert("X is greater than 5");
}`

vi) `let y =20;
if (y > 15 or y < 30){
 alert(" y is valid");
}`

3. What will be the output of the following programs?

- i)

```
var choice = 3;
switch (choice){

case 1:
    alert("Cricket");
    break;
case 2:
    alert("Foot Ball");
    break;
case 3:
    alert("Tennis");
    break;
default:
    alert("Error");
    break;
}
```
- ii)

```
var choice = 3;
switch (choice){

case 1:
    alert("Cricket");

case 2:
    alert("Foot Ball");

case 3:
    alert("Tennis");

default:
    alert("Error");
}
```
- iii)

```
var day = 2;
switch (day){

case 1:
    alert("Sun day");
    break;
case 4/2:
    alert("Mon day");
    break;
```

```
    case 3:
      alert("Tues day");
      break;

    default:
      alert("Error");
  }
```

```
iv) var day = 1;
     switch (day -2){

       case 1:
         alert("Sun day");
         break;
       case 4/2:
         alert("Mon day");
         break;

       case 3:
         alert("Tues day");
         break;

       default:
         alert("Error");
     }
```