Conditional Statements

1.Traffic Light System

Simulate a traffic light system:

If the light is red, log "Stop."

If the light is yellow, log "Get ready to move."

If the light is green, log "Go."

If the input doesn't match any color, log "Invalid input."

```
var light = "red";
if (light == "red") {
  console.log("stop");
} else if (light == "yellow") {
  console.log("Get ready to move");
} else if (light == "green") {
  console.log("go");
} else {
  console.log("Invalid output");
}
```

Output: stop

Explanation: Here we have created a variable light and assigned value red to it. In next step we are checking the condition by using if statement. Here the value and condition are compared with comparison operator. They both are equal so it gives the output as Stop.

2. Write a program that describes the temperature:

If the temperature is exactly 0, log "It's freezing cold."

If the temperature is exactly 15, log "It's a cool day."

If the temperature is exactly 25, log "It's a pleasant day."

If the temperature doesn't match any of these, log "Unknown weather."

```
var temperature = "0";
if (temperature == "0") {
   console.log("It's freezing cold");
} else if (temperatue == "15") {
   console.log("It's a cool day");
} else if (temperatue == "25") {
   console.log("It's a pleasant day");
} else {
   console.log("Unknown");
```

}

Output: "It's freezing cold"

Explanation:

Here we have created a variable temperature and assigned value 0 to it. In next step we are checking the condition by using if statement. Here the value and condition are compared with comparison operator. They both are equal so it gives the output as It's freezing cold.

3. Create a program that takes input of a number representing the day of the week (1-7):

```
If the number is 1, log "Today is Monday."

If the number is 2, log "Today is Tuesday."

If the number is 3, log "Today is Wednesday."

If the number is 4, log "Today is Thursday."

If the number is 5, log "Today is Friday."

If the number is 6, log "Today is Saturday."

If the number is 7, log "Today is Sunday."

If the input is not between 1 and 7, log "Invalid day number."
```

```
var day = "5";
if (day == "1") {
 console.log("Today is Monday");
} else if (day == "2") {
 console.log("Today is Tuesday");
} else if (day == "3") {
  console.log("Today is Wednesday");
} else if (day == "4") {
 console.log("Today is Thursday");
} else if (day == "5") {
  console.log("Today is Friday");
} else if (day == "6") {
  console.log("Today is Saturday");
} else if (day == "7") {
  console.log("Today is Sunday");
} else {
  console.log("Invalid day");
```

Output: Today is Friday

Explanation:

Here we have created a variable day and assigned value 5 to it. Then we have created a else if ladder. The else if ladder checks the condition in each block. Here, value is compared with condition and gives the output as Today is Friday