

Lesson 03 Demo 01

Implementing if-else Conditions for Applying Promo Codes

Objective: To demonstrate how to implement if-else conditions to apply promo codes and calculate discounts based on specific conditions

Tools Required: Visual Studio Code and Node.js

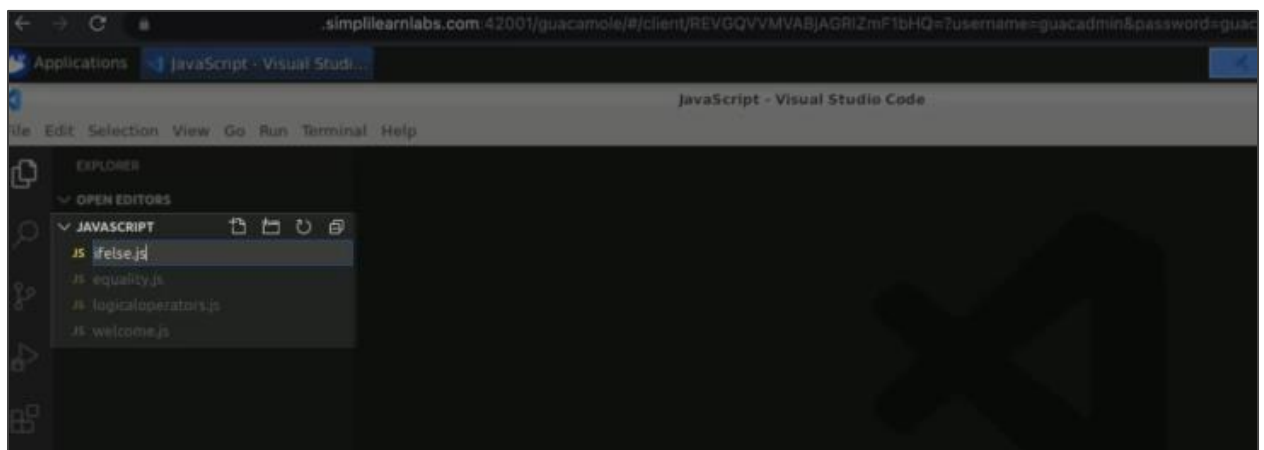
Prerequisites: None

Steps to be followed:

1. Write an algorithm to apply promo codes and calculate discounts
2. Test the code with different promo codes and amounts

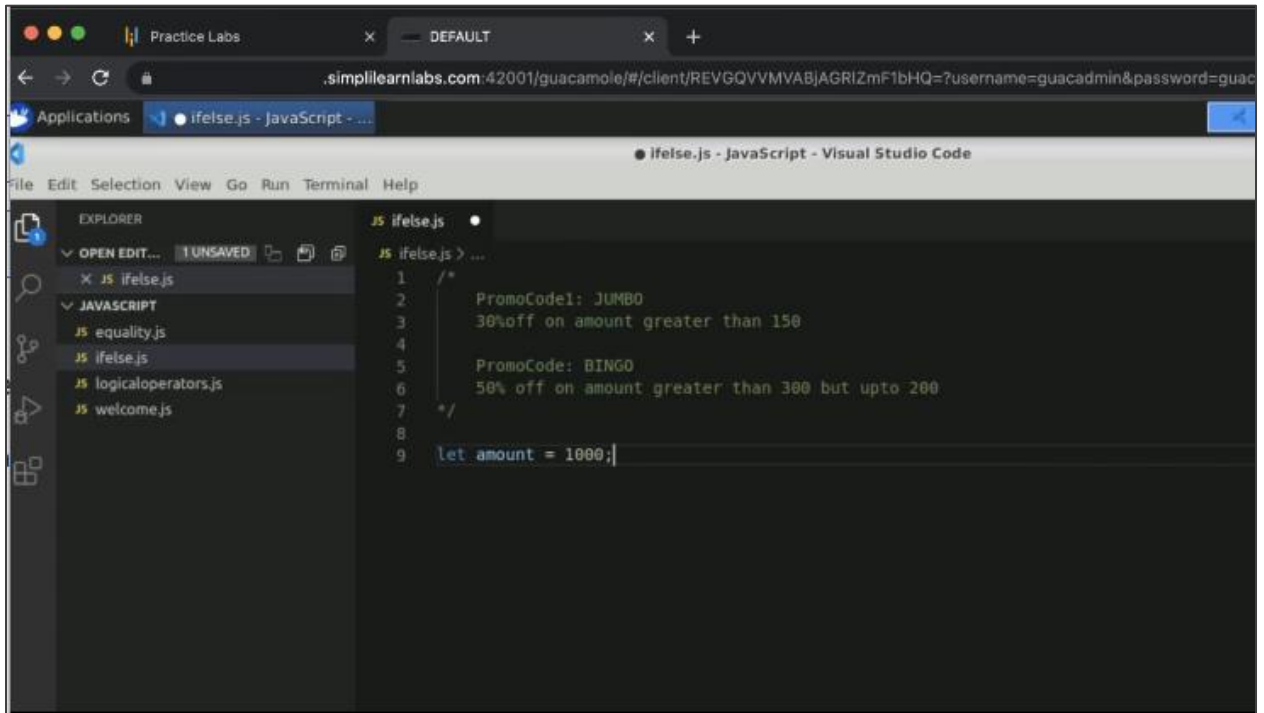
Step 1: Write an algorithm to apply promo codes and calculate discounts

- 1.1 Open Visual Studio Code and create a new JavaScript file named `ifelse.js`



1.2 Initialize the amount variable with a specific value. For example:

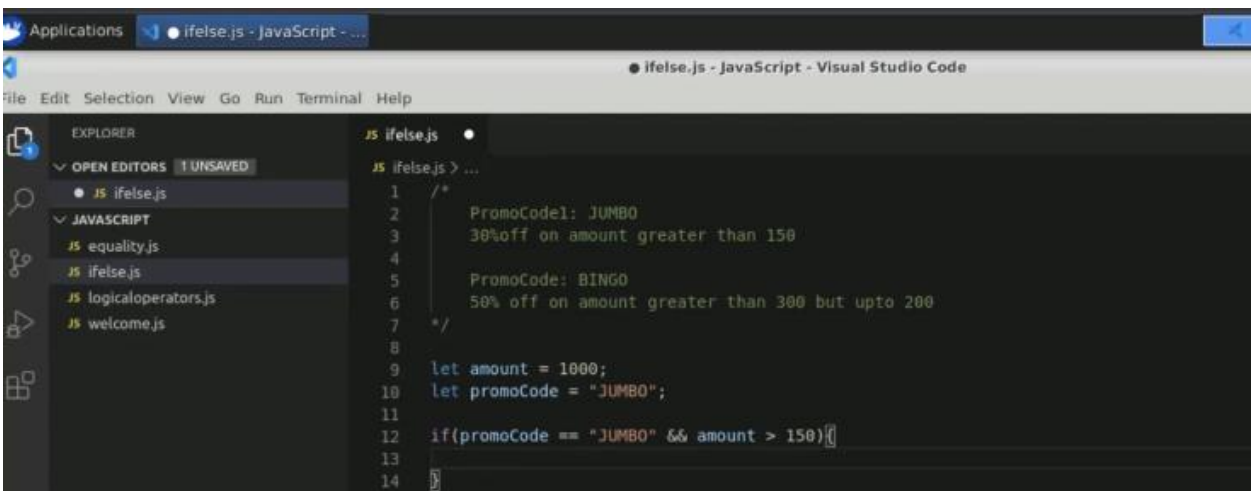
let amount = 1000;



The screenshot shows the Visual Studio Code editor with a file named `ifelse.js` open. The Explorer sidebar on the left shows the file structure with `ifelse.js` selected. The main editor area displays the following code:

```
1  /*  
2     PromoCode1: JUMBO  
3     30%off on amount greater than 150  
4  
5     PromoCode: BINGO  
6     50% off on amount greater than 300 but upto 200  
7  */  
8  
9  let amount = 1000;
```

1.3 Use an if-else statement to check the promo code and apply the corresponding discount conditions. Check if the promo code is equal to **JUMBO** and the amount is greater than or equal to **150**



The screenshot shows the Visual Studio Code editor with the same file `ifelse.js`. The code now includes the initialization of the `amount` variable and the `promoCode` variable, followed by an if-else statement:

```
1  /*  
2     PromoCode1: JUMBO  
3     30%off on amount greater than 150  
4  
5     PromoCode: BINGO  
6     50% off on amount greater than 300 but upto 200  
7  */  
8  
9  let amount = 1000;  
10 let promoCode = "JUMBO";  
11  
12 if(promoCode == "JUMBO" && amount > 150){  
13  
14 }
```

1.4 If the conditions are met, calculate the discount as 30% of the amount

```
JS ifelse.js
JS ifelse.js > ...
1  /*
2   PromoCode: JUMBO
3   30% off on amount greater than 150
4
5   PromoCode: BINGO
6   50% off on amount greater than 300 but upto 200
7  */
8
9  let amount = 1000;
10 let promoCode = "JUMBO";
11
12 if(promoCode == "JUMBO" && amount > 150){
13     amount -= 0.30*amount;
14 }
```

1.5 Use an **else** statement to handle cases where the promo code is invalid, or the amount is insufficient

```
JS ifelse.js  X
JS ifelse.js > [?] amount
1  /*
2   PromoCode: JUMBO
3   30% off on amount greater than 150
4
5   PromoCode: BINGO
6   50% off on amount greater than 300 but upto 200
7  */
8
9  let amount = 1000;
10 let promoCode = "JUMBO";
11
12 if(promoCode == "JUMBO" && amount > 150){
13     amount -= 0.30*amount;
14     console.log("Amount to Pay is: "+amount);
15 }else{
16     console.log("Invalid PromoCode or Amoutn Insufficient");
17 }
```

- 1.6 Use an **else if** statement to check if the promo code is equal to **BINGO** and the amount is greater than **300**

```
JS ifelse.js x
JS ifelse.js > ...
17     console.log("Invalid PromoCode or Amount Insufficient");
18 }*/
19
20 if(promoCode == "JUMBO" && amount > 150){
21     amount -= 0.30*amount;
22     console.log("Amount to Pay is: "+amount);
23 }else if(promoCode == "BINGO" && amount > 300){
24     let discount = 0.50*amount;
25     if(discount<200){
26         amount -= discount;
27     }else{
28         amount -= 200;
29     }
30     console.log("Amount to Pay is: "+amount);
31 }else{
32     console.log("Invalid PromoCode or Amount Insufficient");
```

Note: Use **console.log()** to display the final amount to pay after applying the promo code and discount

Step 2: Test the code with different promo codes and amounts

2.1 Modify the promo code and amount variables to test different scenarios

```
JS ifelse.js X
JS ifelse.js > ...
17 console.log("Invalid PromoCode or Amount Insufficient");
18 }*/
19
20 if(promoCode == "JUMBO" && amount > 150){
21     amount -= 0.30*amount;
22     console.log("Amount to Pay is: "+amount);
23 }else if(promoCode == "BINGO" && amount > 300){
24     let discount = 0.50*amount;
25     if(discount<200){
26         amount -= discount;
27     }else{
28         amount -= 200;
29     }
30     console.log("Amount to Pay is: "+amount);
31 }else{
32     console.log("Invalid PromoCode or Amount Insufficient");
33 }
34 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Amount to Pay is: 700
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Invalid PromoCode or Amount Insufficient
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Invalid PromoCode or Amount Insufficient
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Amount to Pay is: 800
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$
```

```

JS ifelse.js
JS ifelse.js > amount
1  /*
2      PromoCode1: JUMBO
3      30%off on amount greater than 150
4
5      PromoCode: BINGO
6      50% off on amount greater than 300 but upto 200
7  */
8
9  let amount = 360;
10 let promoCode = "BINGO";
11

```

2.2 Run the program and observe the output for different promo codes and amounts

```

19
20 if(promoCode == "JUMBO" && amount > 150){
21     amount -= 0.30*amount;
22     console.log("Amount to Pay is: "+amount);
23 }else if(promoCode == "BINGO" && amount > 300){
24     let discount = 0.50*amount;
25     if(discount<200){
26         amount -= discount;
27     }
28 }
29

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```

Amount to Pay is: 700
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Invalid PromoCode or Amount Insufficient
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Invalid PromoCode or Amount Insufficient
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Amount to Pay is: 800
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$ node ifelse.js
Amount to Pay is: 180
erishantgmail@ip-172-31-90-232:~/Desktop/JavaScript$

```

By following the above steps, you can successfully implement if-else conditions to apply promo codes, calculate discounts based on specific conditions, and determine the final amount to be paid.