

Core Javascript-1 Assignment Solution

Q1. Write a program that grades students based on their marks.

- If greater than 90 then A Grade
- If between 70 and 90 then a B grade
- If between 50 and 70 then a C grade
- Below 50 then an F grade

Answer:

```
JS Q1.js
1  var marks=95;
2  let grade;
3
4  if(marks>90){
5      grade='A grade';
6  }else if(marks>=70 && marks<=90){
7      grade='B grade';
8  }else if(marks>=50 && marks<=70){
9      grade='C grade';
10 }else{
11     grade='F grade';
12 }
13 console.log('your grade is:', grade)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q1.js
your grade is: A grade
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> []

Q2. Generate numbers between any 2 given numbers.

Ex.

```
Const num1 = 10;  
Const num2 = 25;
```

Output: 11,12,13,....., 25

Answer:

```
JS Q1.js JS Q2.js
1  const num1=10
2  const num2=25
3
4  for(let i=num1+1; i<=num2; i++){
5      console.log(i)
6  }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell

PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q2.js
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> []

Q3. Use a nested ternary operator to check that a number is positive, negative or zero. You have to print "positive" if the number is positive and similarly for negative and zero also.

Answer:

```
JS Q1.js JS Q3.js X
JS Q3.js > ...
1 var number=5;
2 (number>0)? console.log("positive"):(number<0)? console.log('Negative'): console.log('zero')

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q3.js
positive
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> []
```

Q4. Describe the usage of the comma operator in JavaScript and provide an example.

Answer: Comma operator is used to write multiple expressions in a single statement. Example-

```
JS Q1.js JS Q4.js X
JS Q4.js > ...
1 var a=10, b=20, c=30
2 console.log(a,b,c)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q4.js
10 20 30
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> []
```

Q5. You're creating a basic login system. Make a login function with two things: a username and a password. Check if the username is "admin" and the password is "12345". If they're both correct, show "Login successful"; if not, show "Invalid credentials."

Answer:

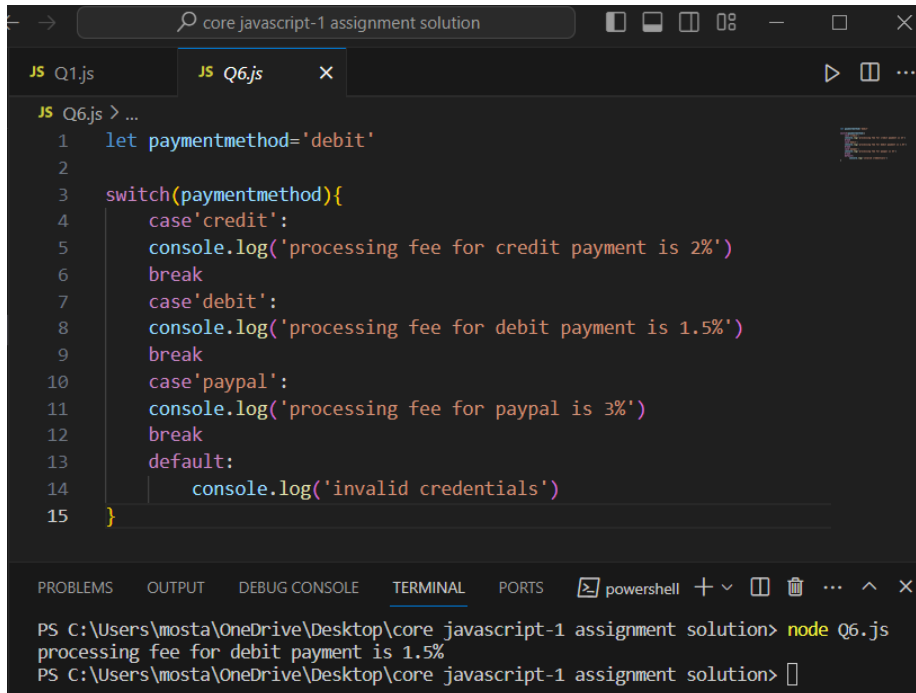
```
← → core javascript-1 assignment solution
JS Q1.js JS Q5.js X
JS Q5.js > ...
1 let username= 'admin'
2 let password= '12345'
3
4 if(username=='admin' && password=='12345'){
5   console.log('login successful')
6 }else{
7   console.log('invalid credentials')
8 }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell + v [] [] ... ^ X

PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q5.js
login successful
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> []
```

Q6. You are working on an e-commerce platform. Write a JavaScript program that takes the payment method ("credit", "debit", or "paypal") as input and uses a switch statement to determine and print the processing fee associated with each payment method. For example, "credit" may have a processing fee of 2%, "debit" 1.5%, and "paypal" 3%.

Answer:



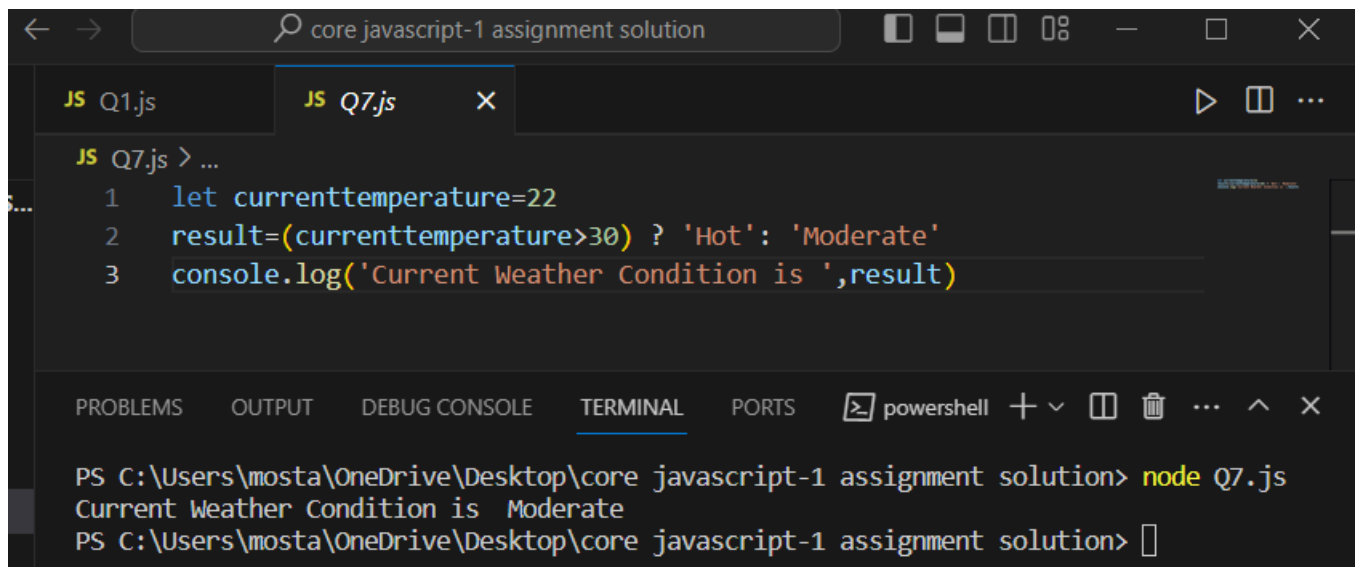
```
JS Q6.js > ...
1 let paymentmethod='debit'
2
3 switch(paymentmethod){
4   case'credit':
5     console.log('processing fee for credit payment is 2%')
6     break
7   case'debit':
8     console.log('processing fee for debit payment is 1.5%')
9     break
10  case'paypal':
11    console.log('processing fee for paypal is 3%')
12    break
13  default:
14    console.log('invalid credentials')
15 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell + v [] [] ... ^ X

```
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q6.js
processing fee for debit payment is 1.5%
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> [ ]
```

Q7. You are building a weather application. Write a JavaScript program that takes the current temperature as input and uses the conditional (ternary) operator to determine and print the weather condition. If the temperature is above 30°C, the condition is "Hot"; otherwise, it is "Moderate".

Answer:



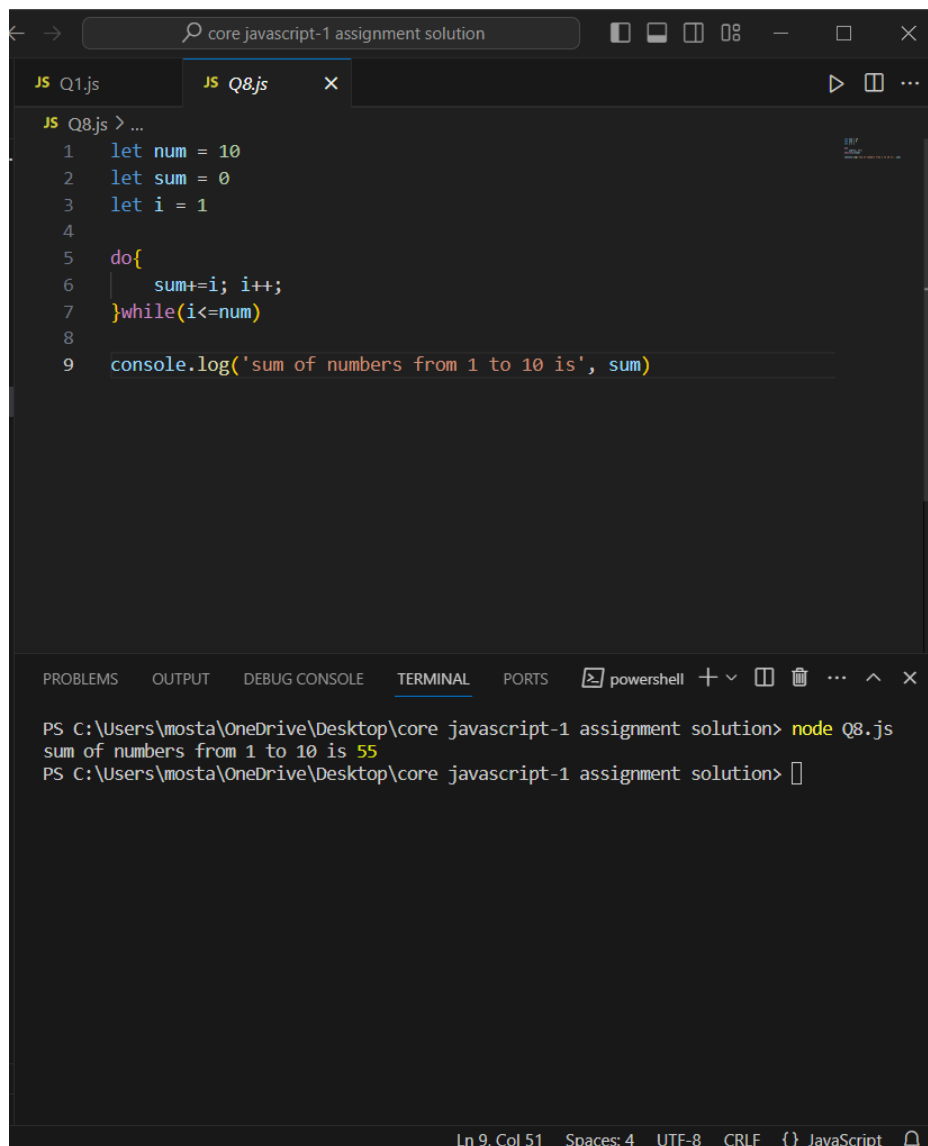
```
JS Q7.js > ...
1 let currenttemperature=22
2 result=(currenttemperature>30) ? 'Hot': 'Moderate'
3 console.log('Current Weather Condition is ',result)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell + v [] [] ... ^ X

```
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q7.js
Current Weather Condition is Moderate
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> [ ]
```

Q8. You are creating a program to calculate the sum of numbers. Write a JavaScript program that takes a positive integer as input and uses a do-while loop to calculate and print the sum of all numbers from 1 to the given integer.

Answer:



```
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JS Q1.js JS Q8.js x
JS Q8.js > ...
1 let num = 10
2 let sum = 0
3 let i = 1
4
5 do{
6     sum+=i; i++;
7 }while(i<=num)
8
9 console.log('sum of numbers from 1 to 10 is', sum)

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell + -
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution> node Q8.js
sum of numbers from 1 to 10 is 55
PS C:\Users\mosta\OneDrive\Desktop\core javascript-1 assignment solution>

Ln 9, Col 51 Spaces: 4 UTF-8 CRLF {} JavaScript
```