COMSATS UNIVERSITY ISLAMABAD
ATTOCK CAMPUS

Assignment # 1

Name: Muhammad Muaaz Shoaib
Registration Number: FA20-BCS-074
Course name: Mobile Application Development   **Course Code: CSC303**
Instructor: Babar Shahzad   **Marks: 10**
Date: March 12, 2023
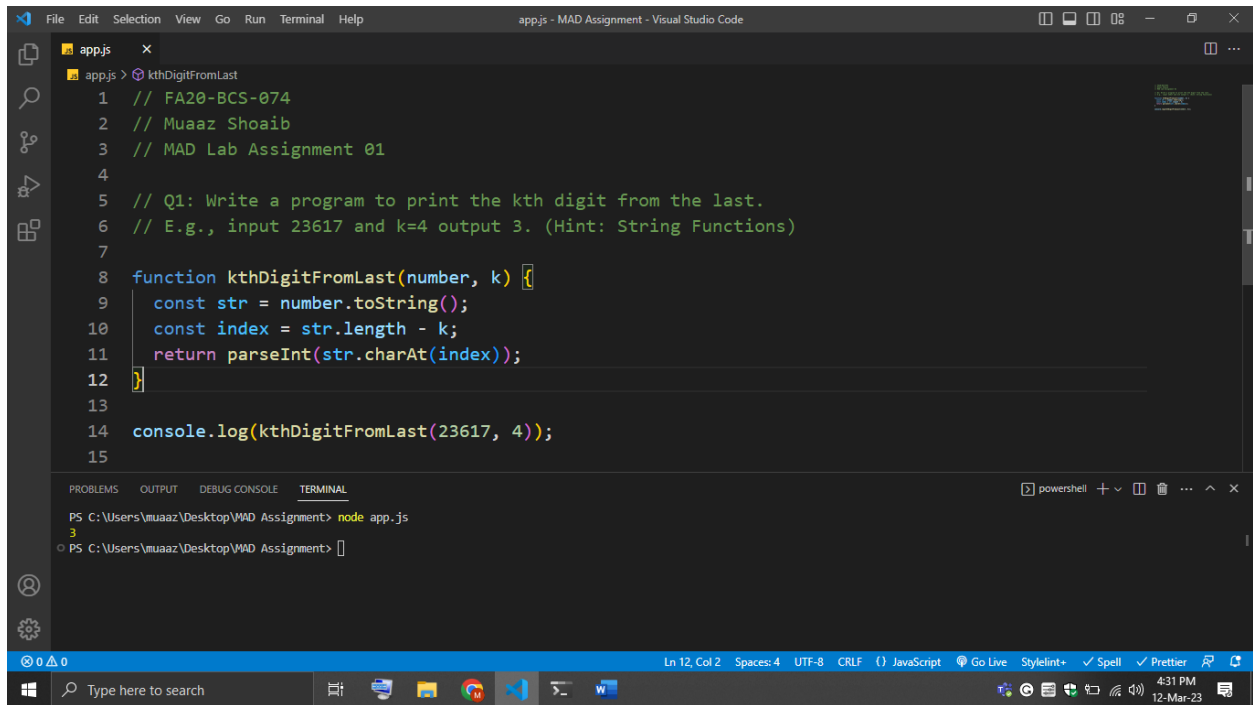**Submission deadline: 12 March 2023**

Problem 1:

Write a program to print the kth digit from the last. E.g., input 23617 and k=4 output 3. *(Hint: String Functions)*

```javascript
// FA20-BCS-074
// Muaaz Shoaib
// MAD Lab Assignment 01

// Q1: Write a program to print the kth digit from
the last.
// E.g., input 23617 and k=4 output 3. (Hint: String
Functions)

function kthDigitFromLast(number, k) {
  const str = number.toString();
  const index = str.length - k;
  return parseInt(str.charAt(index));
}

console.log(kthDigitFromLast(23617, 4));
```

```
app.js ×
app.js > kthDigitFromLast
 1   // FA20-BCS-074
 2   // Muaaz Shoaib
 3   // MAD Lab Assignment 01
 4
 5   // Q1: Write a program to print the kth digit from the last.
 6   // E.g., input 23617 and k=4 output 3. (Hint: String Functions)
 7
 8   function kthDigitFromLast(number, k) {
 9     const str = number.toString();
10     const index = str.length - k;
11     return parseInt(str.charAt(index));
12   }
13
14   console.log(kthDigitFromLast(23617, 4));
15
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL                              powershell

PS C:\Users\muaaz\Desktop\MAD Assignment> node app.js
3
PS C:\Users\muaaz\Desktop\MAD Assignment>
```

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Problem 2:

Write a program to find the sum of all digits. Input 23618 output 2+3+6+1+8=20 *(Hint: String Functions)*

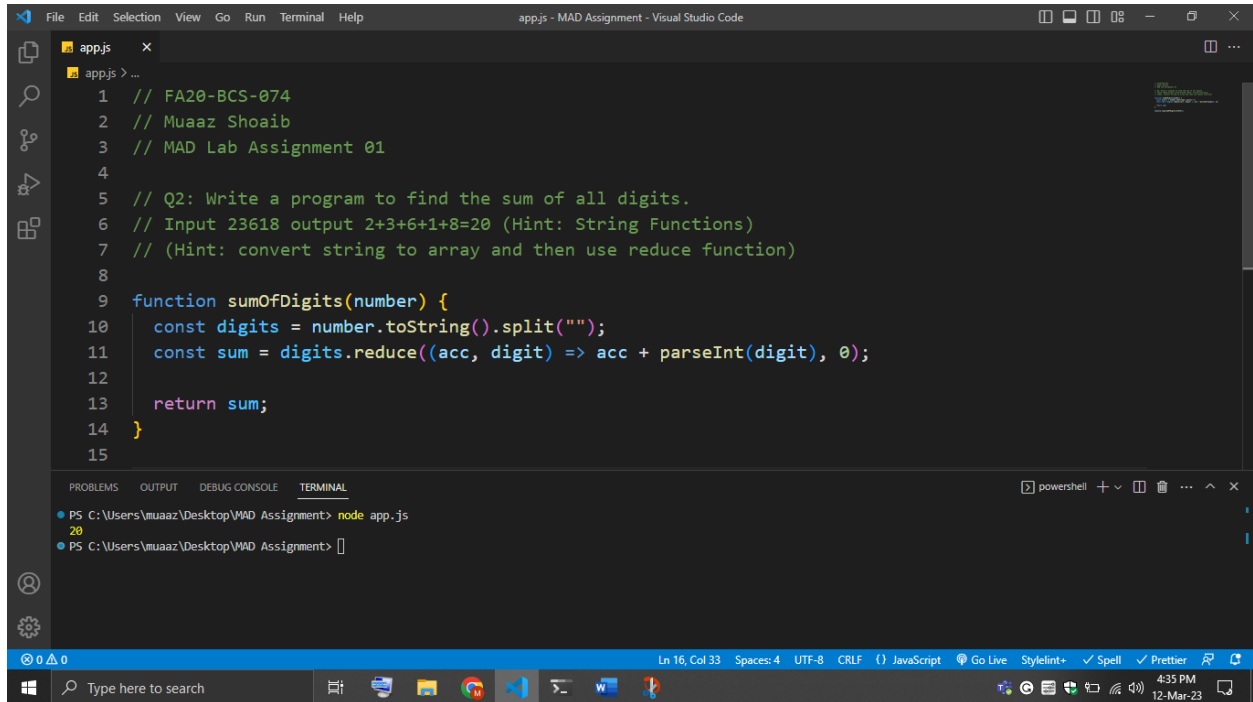*(Hint: convert string to array and then use reduce function)*

```
// FA20-BCS-074
// Muaaz Shoaib
// MAD Lab Assignment 01

// Q2: Write a program to find the sum of all digits.
// Input 23618 output 2+3+6+1+8=20 (Hint: String
Functions)
// (Hint: convert string to array and then use reduce
function)

function sumOfDigits(number) {
  const digits = number.toString().split("");
  const sum = digits.reduce((acc, digit) => acc +
parseInt(digit), 0);

  return sum;
```

```
}

console.log(sumOfDigits(23618));
```


Problem 3:

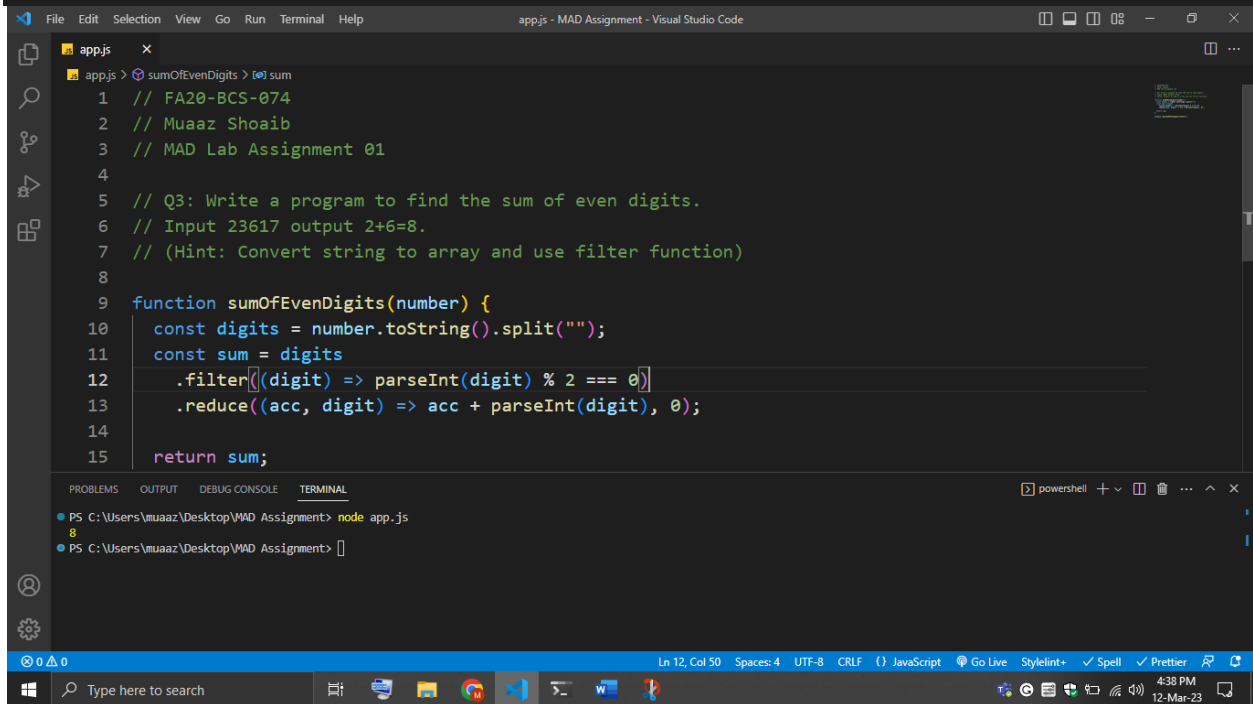Write a program to find the sum of even digits. Input 23617 output 2+6=8.

(Hint: Convert string to array and use filter function)

```
// FA20-BCS-074
// Muaaz Shoaib
// MAD Lab Assignment 01

// Q3: Write a program to find the sum of even
digits.
// Input 23617 output 2+6=8.
// (Hint: Convert string to array and use filter
function)

function sumOfEvenDigits(number) {
```

```javascript
  const digits = number.toString().split("");
  const sum = digits
    .filter((digit) => parseInt(digit) % 2 === 0)
    .reduce((acc, digit) => acc + parseInt(digit),
0);

  return sum;
}


console.log(sumOfEvenDigits(23617));
```

app.js   ✕

app.js > ⊗ sumOfEvenDigits > [∅] sum

```javascript
1   // FA20-BCS-074
2   // Muaaz Shoaib
3   // MAD Lab Assignment 01
4
5   // Q3: Write a program to find the sum of even digits.
6   // Input 23617 output 2+6=8.
7   // (Hint: Convert string to array and use filter function)
8
9   function sumOfEvenDigits(number) {
10    const digits = number.toString().split("");
11    const sum = digits
12      .filter((digit) => parseInt(digit) % 2 === 0)
13      .reduce((acc, digit) => acc + parseInt(digit), 0);
14
15    return sum;
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   **TERMINAL**

```
● PS C:\Users\muaaz\Desktop\MAD Assignment> node app.js
  8
● PS C:\Users\muaaz\Desktop\MAD Assignment>
```

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