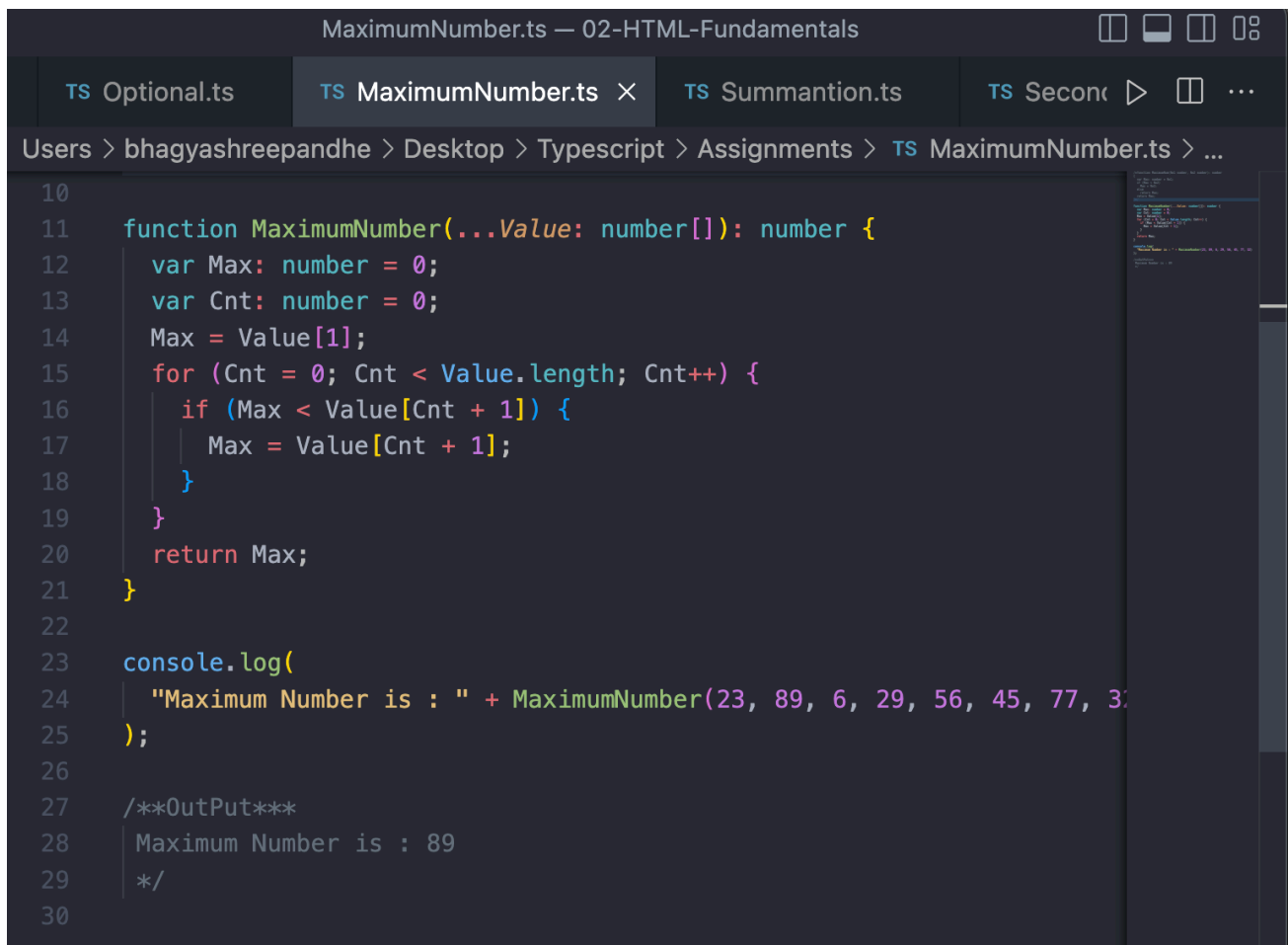
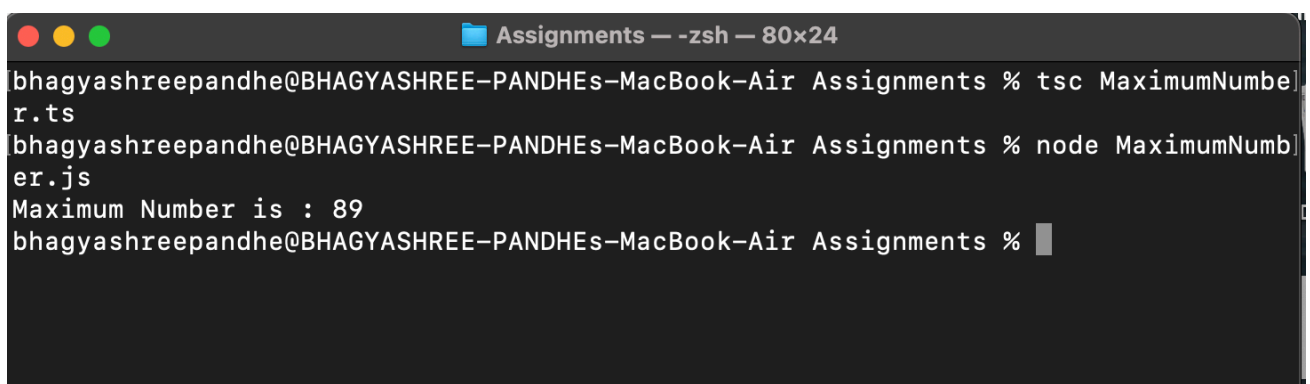


Assignment 2:

Q1:

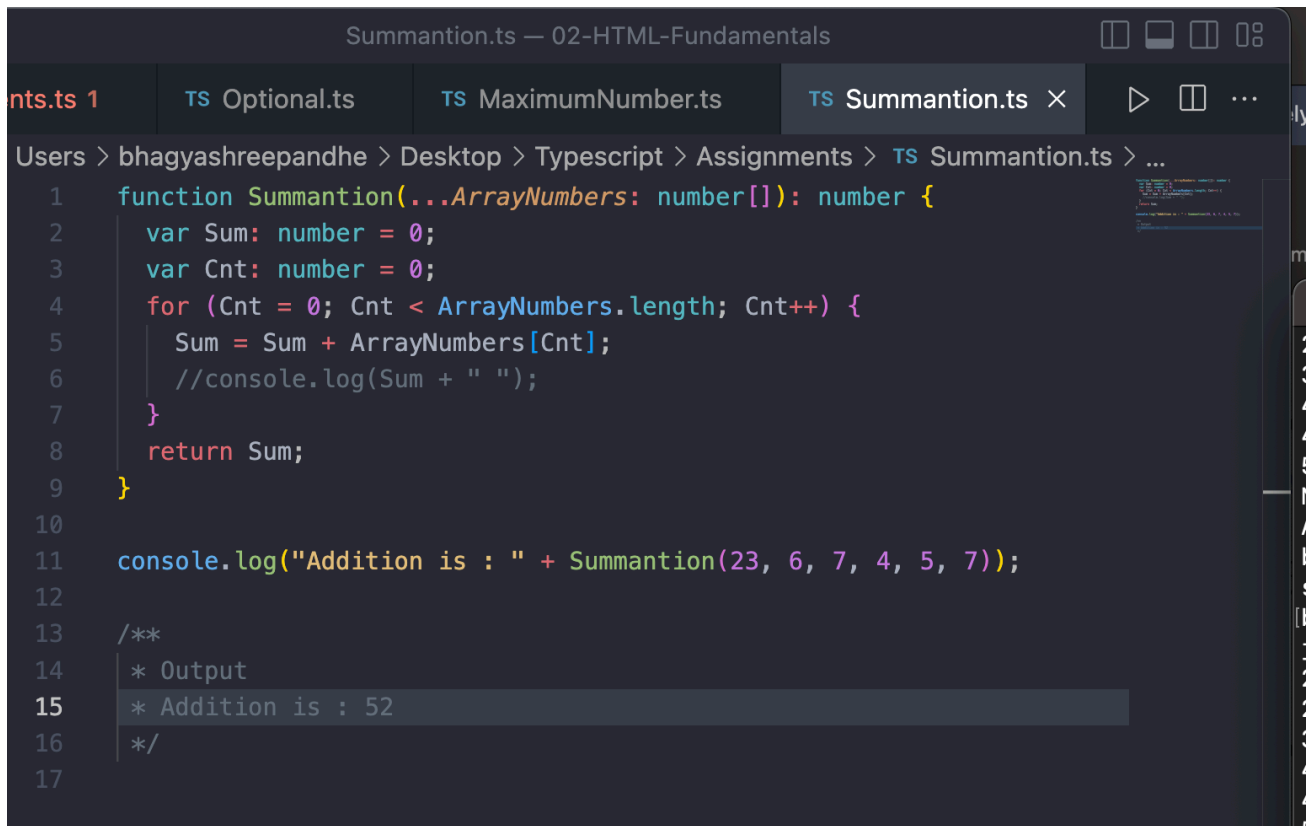


```
MaximumNumber.ts — 02-HTML-Fundamentals
TS Optional.ts TS MaximumNumber.ts X TS Summation.ts TS Second.ts ...
Users > bhagyashreepandhe > Desktop > Typescript > Assignments > TS MaximumNumber.ts > ...
10
11 function MaximumNumber(...Value: number[]): number {
12     var Max: number = 0;
13     var Cnt: number = 0;
14     Max = Value[1];
15     for (Cnt = 0; Cnt < Value.length; Cnt++) {
16         if (Max < Value[Cnt + 1]) {
17             Max = Value[Cnt + 1];
18         }
19     }
20     return Max;
21 }
22
23 console.log(
24     "Maximum Number is : " + MaximumNumber(23, 89, 6, 29, 56, 45, 77, 30);
25 );
26
27 /**OutPut**
28 Maximum Number is : 89
29 */
30
```



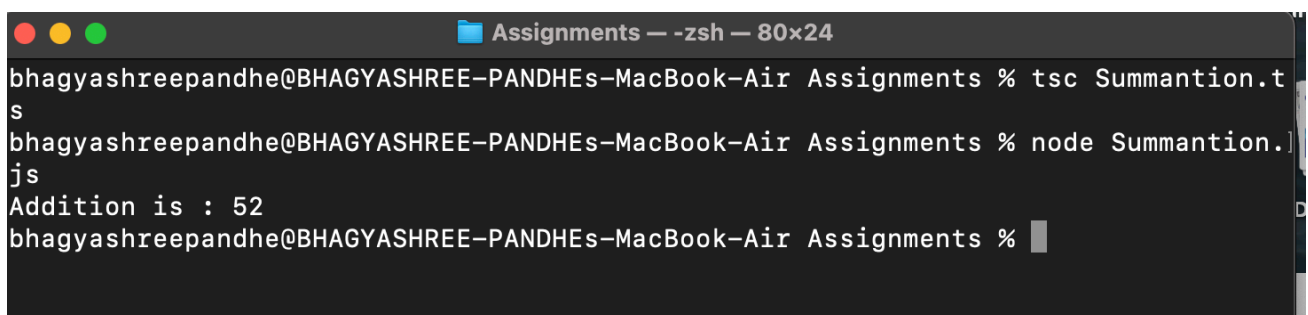
```
Assignments — -zsh — 80x24
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc MaximumNumber.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node MaximumNumber.js
Maximum Number is : 89
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```

Q2



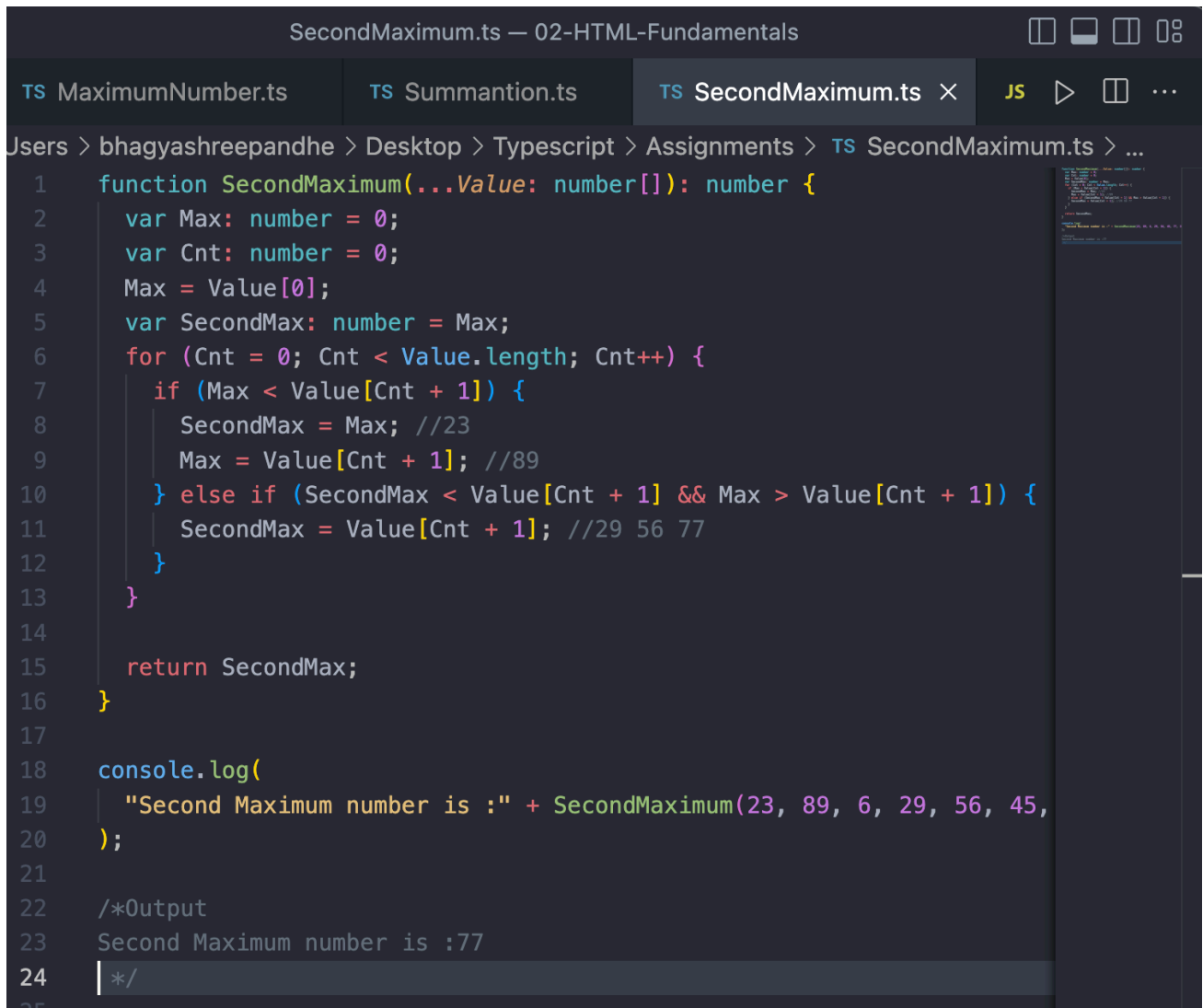
```
Summation.ts — 02-HTML-Fundamentals
TS Optional.ts
TS MaximumNumber.ts
TS Summation.ts ×
Users > bhagyashreepandhe > Desktop > Typescript > Assignments > TS Summation.ts > ...
1  function Summation(...ArrayNumbers: number[]): number {
2      var Sum: number = 0;
3      var Cnt: number = 0;
4      for (Cnt = 0; Cnt < ArrayNumbers.length; Cnt++) {
5          Sum = Sum + ArrayNumbers[Cnt];
6          //console.log(Sum + " ");
7      }
8      return Sum;
9  }
10
11  console.log("Addition is : " + Summation(23, 6, 7, 4, 5, 7));
12
13  /**
14   * Output
15   * Addition is : 52
16   */
17
```

Output:



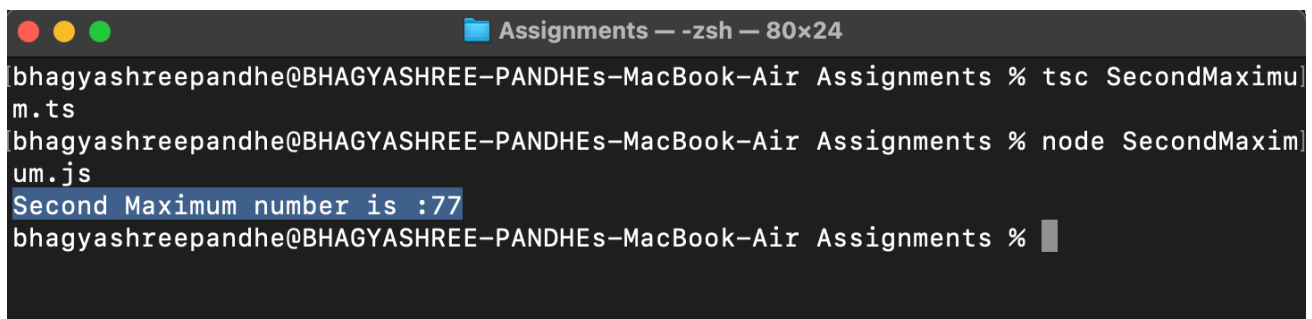
```
Assignments — -zsh — 80x24
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc Summation.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node Summation.js
Addition is : 52
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```

Q3:



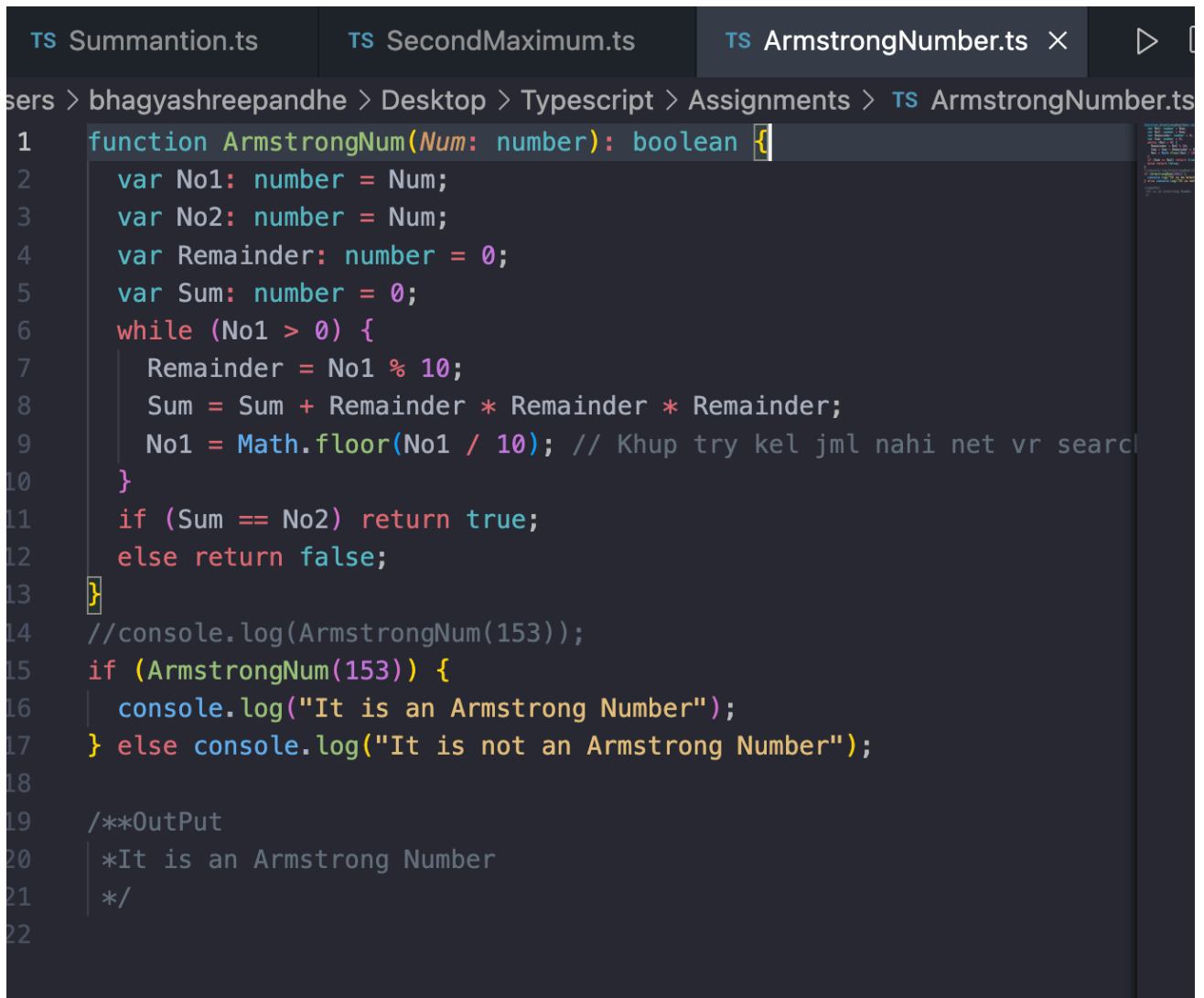
```
SecondMaximum.ts — 02-HTML-Fundamentals
TS MaximumNumber.ts TS Summation.ts TS SecondMaximum.ts X JS ▶ □ ...
Users > bhagyashreepandhe > Desktop > Typescript > Assignments > TS SecondMaximum.ts > ...
1  function SecondMaximum(...Value: number[]): number {
2      var Max: number = 0;
3      var Cnt: number = 0;
4      Max = Value[0];
5      var SecondMax: number = Max;
6      for (Cnt = 0; Cnt < Value.length; Cnt++) {
7          if (Max < Value[Cnt + 1]) {
8              SecondMax = Max; //23
9              Max = Value[Cnt + 1]; //89
10         } else if (SecondMax < Value[Cnt + 1] && Max > Value[Cnt + 1]) {
11             SecondMax = Value[Cnt + 1]; //29 56 77
12         }
13     }
14
15     return SecondMax;
16 }
17
18 console.log(
19     "Second Maximum number is :" + SecondMaximum(23, 89, 6, 29, 56, 45,
20 );
21
22 /*Output
23 Second Maximum number is :77
24 */
25
```

Output:



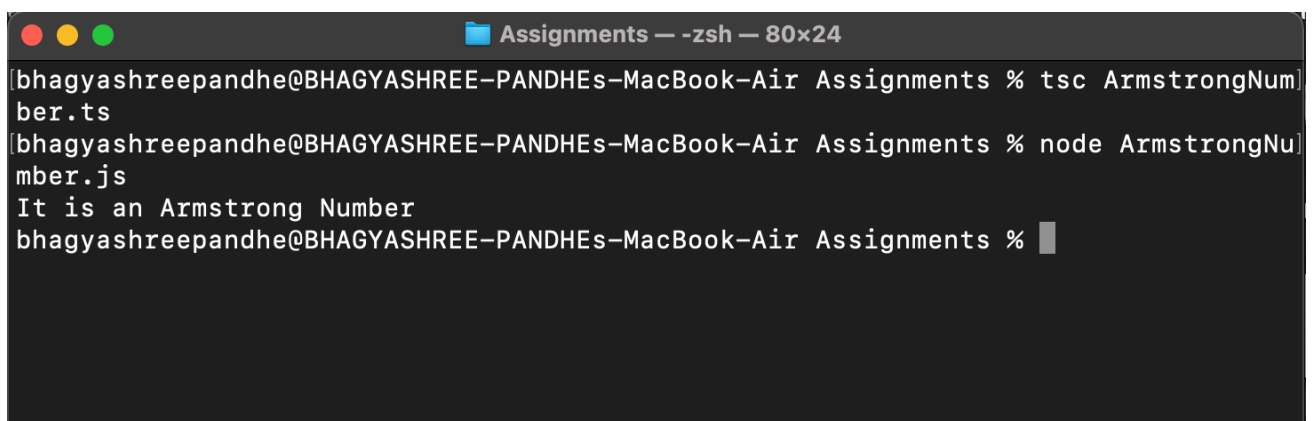
```
Assignments — -zsh — 80x24
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc SecondMaximum.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node SecondMaximum.js
Second Maximum number is :77
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```

Q4:



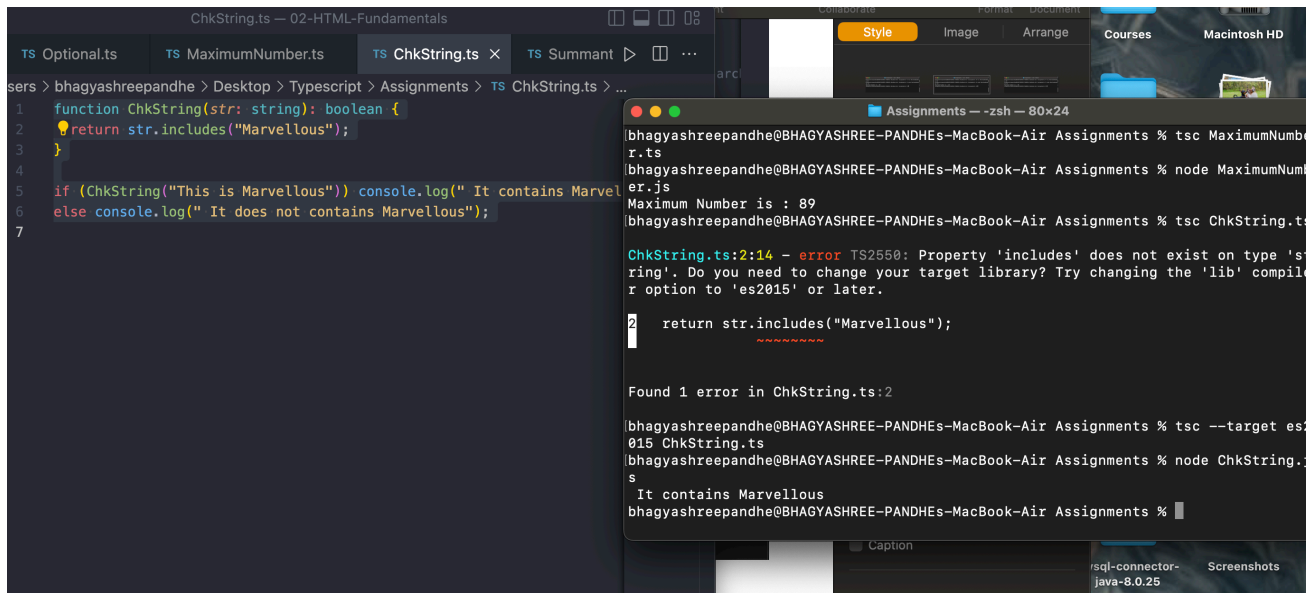
```
TS Summation.ts    TS SecondMaximum.ts    TS ArmstrongNumber.ts ×
Users > bhagyashreepandhe > Desktop > Typescript > Assignments > TS ArmstrongNumber.ts
1  function ArmstrongNum(Num: number): boolean {
2      var No1: number = Num;
3      var No2: number = Num;
4      var Remainder: number = 0;
5      var Sum: number = 0;
6      while (No1 > 0) {
7          Remainder = No1 % 10;
8          Sum = Sum + Remainder * Remainder * Remainder;
9          No1 = Math.floor(No1 / 10); // Khup try kel jml nahi net vr search
10     }
11     if (Sum == No2) return true;
12     else return false;
13 }
14 //console.log(ArmstrongNum(153));
15 if (ArmstrongNum(153)) {
16     console.log("It is an Armstrong Number");
17 } else console.log("It is not an Armstrong Number");
18
19 /**OutPut
20  *It is an Armstrong Number
21  */
22
```

Output:



```
Assignments — -zsh — 80x24
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc ArmstrongNumber.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node ArmstrongNumber.js
It is an Armstrong Number
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```

Q5:

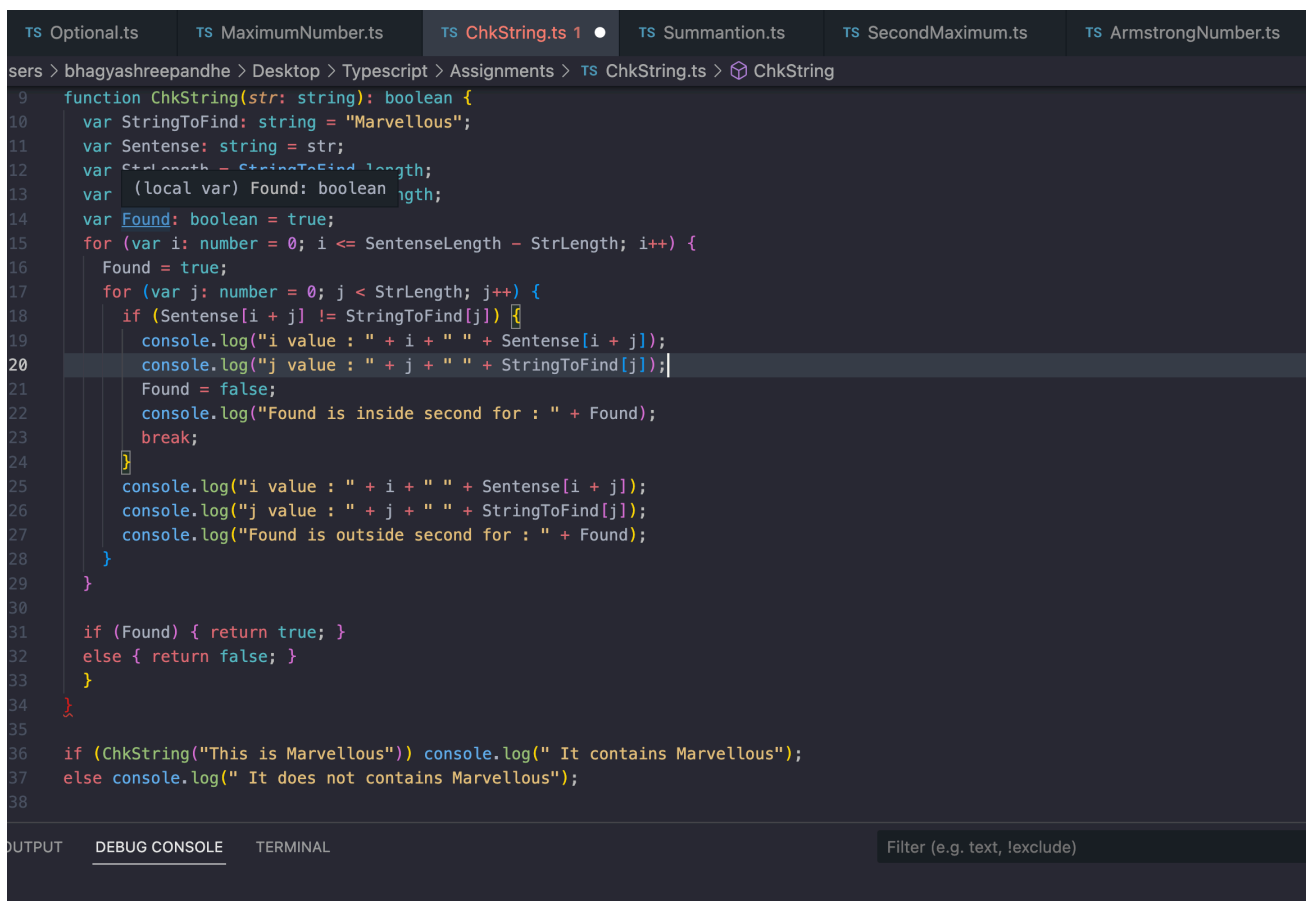


```
ChkString.ts — 02-HTML-Fundamentals
TS Optional.ts TS MaximumNumber.ts TS ChkString.ts TS Summant
1 function ChkString(str: string): boolean {
2   return str.includes("Marvellous");
3 }
4
5 if (ChkString("This is Marvellous")) console.log(" It contains Marvellous");
6 else console.log(" It does not contains Marvellous");
7

bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc MaximumNumber.ts
Maximum Number is : 89
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc ChkString.ts
ChkString.ts:2:14 - error TS2550: Property 'includes' does not exist on type 'string'. Do you need to change your target library? Try changing the 'lib' compiler option to 'es2015' or later.
2   return str.includes("Marvellous");
               ~~~~~

Found 1 error in ChkString.ts:2

bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc --target es2015 ChkString.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node ChkString.js
It contains Marvellous
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```



```
TS Optional.ts TS MaximumNumber.ts TS ChkString.ts 1 TS Summantion.ts TS SecondMaximum.ts TS ArmstrongNumber.ts
bhagyashreepandhe > Desktop > Typescript > Assignments > TS ChkString.ts > ChkString
9 function ChkString(str: string): boolean {
10   var StringToFind: string = "Marvellous";
11   var Sentence: string = str;
12   var StrLength = Sentence.length;
13   var (local var) Found: boolean = true;
14   var Found: boolean = true;
15   for (var i: number = 0; i <= Sentence.length - StringToFind.length; i++) {
16     Found = true;
17     for (var j: number = 0; j < StringToFind.length; j++) {
18       if (Sentence[i + j] !== StringToFind[j]) {
19         console.log("i value : " + i + " " + Sentence[i + j]);
20         console.log("j value : " + j + " " + StringToFind[j]);
21         Found = false;
22         console.log("Found is inside second for : " + Found);
23         break;
24       }
25       console.log("i value : " + i + " " + Sentence[i + j]);
26       console.log("j value : " + j + " " + StringToFind[j]);
27       console.log("Found is outside second for : " + Found);
28     }
29   }
30
31   if (Found) { return true; }
32   else { return false; }
33 }
34
35
36 if (ChkString("This is Marvellous")) console.log(" It contains Marvellous");
37 else console.log(" It does not contains Marvellous");
38

OUTPUT DEBUG CONSOLE TERMINAL
Filter (e.g. text, !exclude)
```

Output :

```
Assignments — -zsh — 80x52
j value : 0 M
Found is inside second for : false
i value : 2 i
j value : 0 M
Found is inside second for : false
i value : 3 s
j value : 0 M
Found is inside second for : false
i value : 4
j value : 0 M
Found is inside second for : false
i value : 5 i
j value : 0 M
Found is inside second for : false
i value : 6 s
j value : 0 M
Found is inside second for : false
i value : 7
j value : 0 M
Found is inside second for : false
i value : 8 M
j value : 0 M
Found is outside second for : true
i value : 8 a
j value : 1 a
Found is outside second for : true
i value : 8 r
j value : 2 r
Found is outside second for : true
i value : 8 v
j value : 3 v
Found is outside second for : true
i value : 8 e
j value : 4 e
Found is outside second for : true
i value : 8 l
j value : 5 l
Found is outside second for : true
i value : 8 l
j value : 6 l
Found is outside second for : true
i value : 8 o
j value : 7 o
Found is outside second for : true
i value : 8 u
j value : 8 u
Found is outside second for : true
i value : 8 s
j value : 9 s
Found is outside second for : true
It contains Marvellous
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```