PanaVerse Assginment

Question#03:

Solution:

Step#01:

What we need(Requirements):
1. A person's name.
2. Display name of that person in following cases.
   Lowercase(all letters are small).
   Uppercase(all letters are capital).
   Titlecase(capitalize initials of every word).

Step#02:

Let's do code.

Code:
Initialize string variable to store person's name.

```typescript
let personName:string='Elon Musk';     //store person's name in block variable.
```

Now we have a build js function called toLowerCase() that will convert all letters in string to the lowercase.

```typescript
let personName:string='Elon Musk';    //store person's name in block variable.
console.log(personName.toLowerCase());   //convert into lowercase
```

Now we have a build js function called toUpperCase() that will convert all letters in string to the uppercase.

```typescript
let personName:string='Elon Musk';    //store person's name in block variable.
console.log(personName.toUpperCase());   //convert into uppercase
```

Now for titlecase we create an array(char) then copy the string on this array because string is a primitive datatype immutable in typescript if you try to rewrite or change value at any specific index of string, it will throw error. So we can change the value on specific index in array.
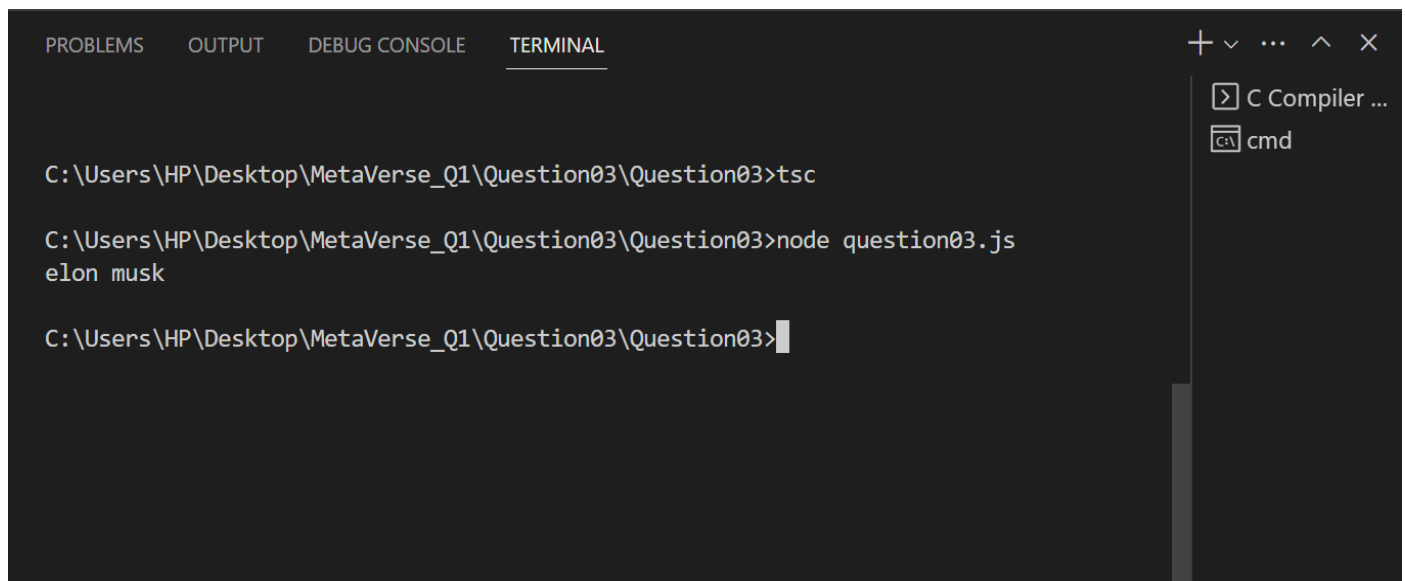
```
let temp=[];
{
for(let i=0;personName[i];i++){
    if(i==0){
    temp[i]=personName[i].toUpperCase();
    }
    else if(personName[i]==' '){
        temp[i]=' ';
        temp[i+1]=personName[i+1].toUpperCase();
        i++;
    }
    else{
    temp[i]=personName[i];
    }
}
}
personName=temp.join('');
console.log(personName);
}
```
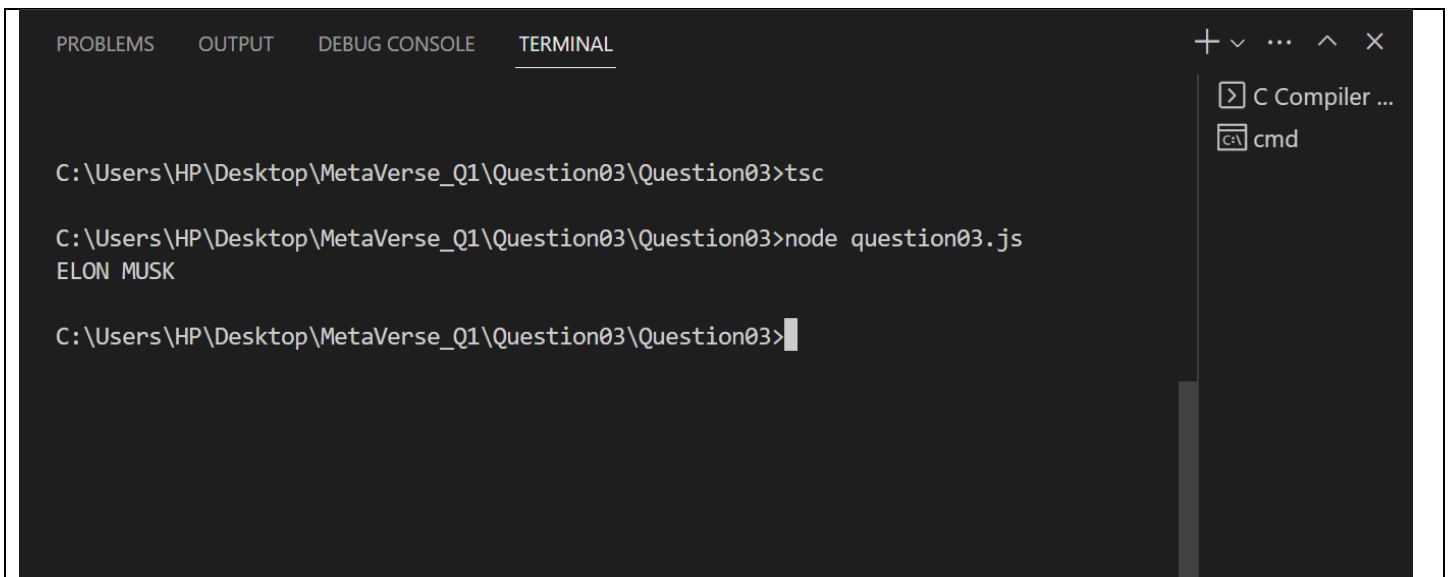
Step#03:

Let's run the code.
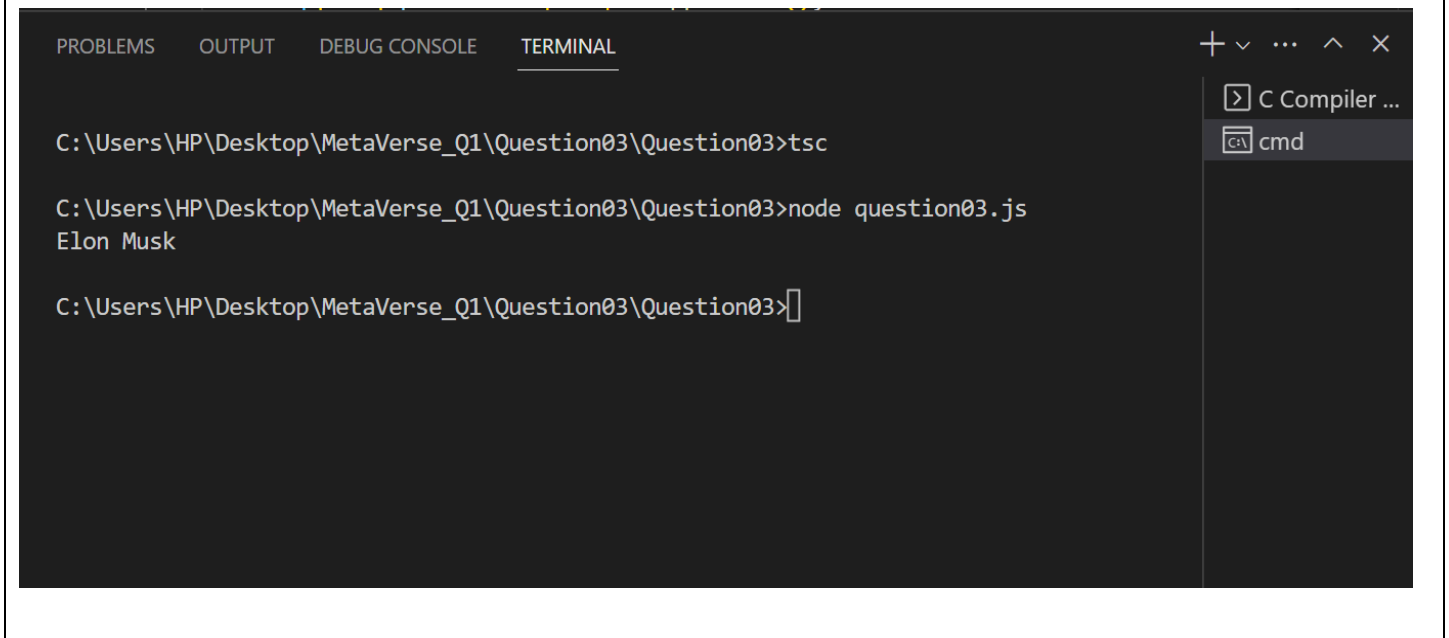Output/Result:
Lowercase.

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL                                    + ∨  ···  ∧  ✕

                                                                                  ⟩ C Compiler …
                                                                                  c∖ cmd

C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>tsc

C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>node question03.js
elon musk

C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>
```

Uppercase.

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL                              + ∨  ···  ∧  ✕

                                                                            ⟩ C Compiler ...
                                                                            C: cmd
  C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>tsc

  C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>node question03.js
  ELON MUSK

  C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>█
```
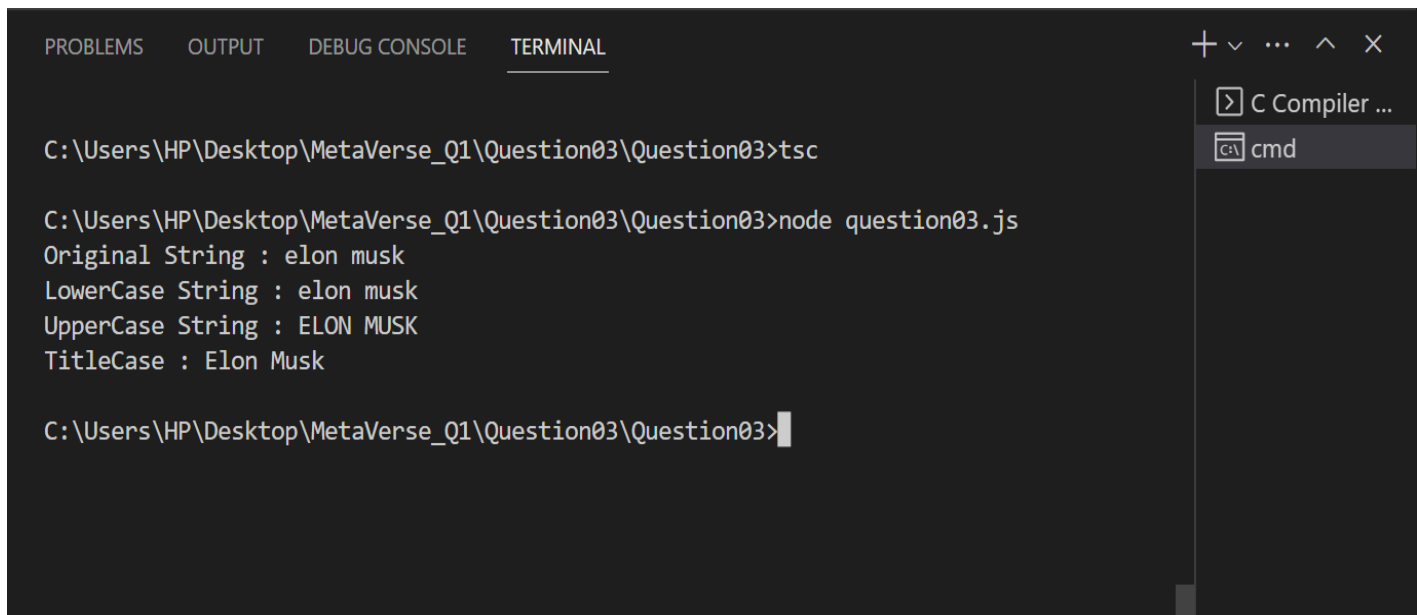
Titlecase.

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL                              + ∨  ···  ∧  ✕

                                                                            ⟩ C Compiler ...
                                                                            C: cmd
  C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>tsc

  C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>node question03.js
  Elon Musk

  C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>▯
```

Full Code Question03:

```typescript
let personName: string = "elon musk"; //store person's name in block variable.
console.log(
  "Original String : " +
    personName +
    "\nLowerCase String : " +
    personName.toLowerCase() +
    "\nUpperCase String : " +
    personName.toUpperCase()
);  //show name in lower & upper case.
```

```
// convert into titlecase.
let temp = [];
{
  for (let i = 0; personName[i]; i++) {
    if (i == 0) {
      temp[i] = personName[i].toUpperCase();
    } else if (personName[i] == " ") {
      temp[i] = " ";
      temp[i + 1] = personName[i + 1].toUpperCase();
      i++;
    } else {
      temp[i] = personName[i];
    }
  }
  personName = temp.join("");
  console.log("TitleCase : "+personName);
}
```

Full Output Question03:

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL                    + ∨  …  ∧  ✕

                                                                   > C Compiler ...
C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>tsc          cmd

C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>node question03.js
Original String : elon musk
LowerCase String : elon musk
UpperCase String : ELON MUSK
TitleCase : Elon Musk

C:\Users\HP\Desktop\MetaVerse_Q1\Question03\Question03>
```