

TASK-10

1.

```
Problem 1

Given a variable `score`, use a ternary operator to determine the performance level:
- `"Excellent"` if `score` is 90 or above,
- `"Good"` if `score` is between 60 and 89,
- `"Needs Improvement"` if `score` is below 60.

**Test Cases:**

1. **Input:** `score = 95`
   **Expected Output:** `"Excellent"`

2. **Input:** `score = 75`
   **Expected Output:** `"Good"`

3. **Input:** `score = 50`
   **Expected Output:** `"Needs Improvement"`
```

Codes:

```
var score = 95;
score >= 90
? console.log("Excellent")
: score >= 60 && score <= 89
? console.log("Good")
: console.log("Need Improvement");
```

```
var score = 75;
score >= 90
? console.log("Excellent")
: score >= 60 && score <= 89
? console.log("Good")
: console.log("Need Improvement");
```

```
var score = 50;
score >= 90
? console.log("Excellent")
: score >= 60 && score <= 89
? console.log("Good")
: console.log("Need Improvement");
```

Outputs:

```
PS D:\23r\js> node Day9.js
Excellent
```

```
PS D:\23r\js> node Day9.js
Good
```

```
PS D:\23r\js> node Day9.js
Need Improvement
```

2.

Problem 2

Given a variable `day`, use a ternary operator to check if it's a weekend:
- `"Weekend"` if `day` is `"Saturday"` or `"Sunday"`,
- `"Weekday"` for any other day.

Test Cases:

1. ****Input:**** `day = "Saturday"`
****Expected Output:**** `"Weekend"`
2. ****Input:**** `day = "Monday"`
****Expected Output:**** `"Weekday"`
3. ****Input:**** `day = "Sunday"`
****Expected Output:**** `"Weekend"`

Codes:

```
var day = "friday";  
(day == "saturday" || day === "sunday")  
  ? console.log("weekend")  
  : console.log("weekday");
```

```
var day = "sunday";  
(day == "saturday" || day === "sunday")  
  ? console.log("weekend")  
  : console.log("weekday");
```

Outputs:

```
PS D:\23r\js> node Day9.js  
weekday
```

```
PS D:\23r\js> node Day9.js  
weekend
```

3.

Problem 3

Given a string `inputString`, use the ternary operator to check if it is a palindrome. A string is considered a palindrome if it reads the same forwards and backwards.

- ****Output:**** `"Palindrome"` if the string is a palindrome,
- `"Not a Palindrome"` otherwise.

Test Cases:

1. ****Input:**** `inputString = "madam"`
****Expected Output:**** `"Palindrome"`
2. ****Input:**** `inputString = "hello"`
****Expected Output:**** `"Not a Palindrome"`
3. ****Input:**** `inputString = "racecar"`
****Expected Output:**** `"Palindrome"`
4. ****Input:**** `inputString = "world"`
****Expected Output:**** `"Not a Palindrome"`

Codes:

```
var a = "madam";
var b = "";
for (i = a.length - 1; i >= 0; i--) {
  b+= a[i];
}
(a == b)
? console.log(`${a} is a Palindrome.`)
: console.log(`${a} is not a Palindrome`);
```

```
var a = "hello";
var b = "";
for (i = a.length - 1; i >= 0; i--) {
  b+= a[i];
}
(a == b)
? console.log(`${a} is a Palindrome.`)
: console.log(`${a} is not a Palindrome`);
```

Outputs:

```
PS D:\23r\js> node Day9.js
madam is a Palindrome.
```

```
PS D:\23r\js> node Day9.js
hello is not a Palindrome
```

4.

```
### Problem 4
Input: HELLO
Output:
H
HE
HEL
HELL
HELLO
```

Code:

```
var str = "HELLO";
var op = "";
for (i = 0; i < str.length; i++) {
  op += str[i];
  console.log(op);
}
```

Output:

```
PS D:\23r\js> node Day9.js
H
HE
HEL
HELL
HELLO
```