ASSIGNMENT 10

Terinary Operator

1.Given a variable 'score', use a ternary operator to determine the performance level:

Input: var score=75

"Excellent", if 'score' is 90 or above,

"Good". if 'score' is between 60 and 89,

"Needs Improvement", if 'score' is below 60.

Code:

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

Output: Excellent

Explanation:

- var score=95; sets the score variable to 95.
- The ternary operator checks several conditions in sequence:

First condition: score==90 || score >90.

- Score is 95, which is greater than 90. This condtiton is true, so console.log("Excellent"); is executed.

2.Given a variable 'day', use a ternary operator to check if it's a weekend :

Input: var day="Sunday"

"Weekend" if day is "Saturday" or "Sunday",

"Weekday" for any other day.

Code:

```
var day = "Sunday";
day == "Saturday" || day == "Sunday"
  ? console.log("Weekend")
  : console.log("Weekday");
```

Output:

Weekend

Explanation:

- The var day = “Sunday”; sets the day variable to “Sunday”.
- The ternary operator checks if day is either “Saturday” or “Sunday”. If true, it executes console.log(“Weekend”); otherwise, it executes console.lof(“Weekday”).
- In this case, day is “Sunday”, which makes the condition true. Therefore, the output is “Weekend”

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.

Input: var inputString = ”madam”

Code:

```
var inputString = "madam";
var str2 = "";
for (i = inputString.length - 1; i >= 0; i--) {
  str2 = str2 + inputString[i];
}
console.log(str2);
inputString == str2 ? console.log("Palindrome") : console.log("Not a
Palindrome");
```

Output: madam

Explanation:

- var inputString=”madam”; initializes the variable with the value “madam”.
- var str2=” ”; initializes an empty string str2.
- The for loop runs backwards through inputString, starting from the last character and ending at the first character. In each iteration, it appends the current character of inputString to str2.

After the loop, str2 becomes “madam”.

- Console.log(str2); prints “madam”.
- Theternary operator checks if inputString is equal to str2. Since they are the same, it prints “Palindrome”.
- So the output is “Palindrome”.

4.Give the output for the following input

Input: “HELLO”

Outputformat:

H

HE

HEL

HELL

HELLO

Code:

```
var str1='HELLO'
var str2=''
for(i in str1){
    str2=str2+str1[i]
    console.log(str2)
}
```

Output:

H

HE

HEL

HELL

HELLO

Explanation:

- var str1='HELLO'; initializes str1 with the value 'HELLO'.
- var str2=''; initializes an empty string str2.
- The for loop iterates over each character in str1.

Each iteration of the loop appends the current character of str1 to str2 and then prints str2. Her's the step-by-step output:

- First iteration(i=0): str2 becomes 'H', console.log(str2) prints H.
- Second iteration(i=1): str2 becomes 'HE', console.log(str2) prints HE.
- Third iteration(i=2): str2 becomes 'HEL', console.log(str2) prints HEL.
- Fourth iteration(i=3): str2 becomes 'HELL', console.log(str2) prints HELL.
- Fifth iteration(i=4): str2 becomes 'HELLO', console.log(str2) prints HELLO.