Practical 1:- Build a "Guess the Number Game" using JavaScript.

<u>**Index.html**</u>

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Practical 1</title>
</head>
<style>
    .table{
        align-items: center;
        text-align: center;
        padding: auto;
    }
</style>
<body>
    <table border="1">
        <tr>
            <th colspan="3">
                <h1>Guess the Number</h1>
            </th>
        </tr>
        <form action="#">
            <tr>
                <td>
                    <input type="text" id="txt1" placeholder="Enter number">
                </td>
                <td>
                    <input type="submit" value="start Guess" id="btn1">
                </td>
                <td>
                    <input  type="submit"  onclick="reset()"  value="Reset"
    id="btn2">
                </td>
            </tr>
        </form>
        <tr>
            <div id="box">
                <td>
                    <p>Previous Guesses: <span id="hh1"></span></p>
                </td>
                <td colspan="2">
                    <p>Remaining Count: <span id="hh2"></span></p>
                </td>
            </div>
        </tr>
        <tr>
            <td colspan="3">
                <p id="lowHigh"></p>
                <p id="random"></p>
            </td>
        </tr>
```

```html
    </table>
    <script src="jquery.js"></script>
    <script src="app.js"></script>
</body>
</html>
```

Game.js

```javascript
var randomNumber=parseInt((Math.random()*100)+1);
var userInput=document.getElementById('txt1');
var submitBtn=document.getElementById('btn1');
var guessNo=document.getElementById('hh1');
var remainingCount=document.getElementById('hh2');
var lowHigh=document.getElementById('lowHigh');
var parentDiv=document.getElementById('box');
var newResetButton=document.createElement('button');
var playGame=true;
var random = document.getElementById('random');
var previousGuesses=[];
var numberGuess=1;
var reset = document.getElementById('btn2');
$("#btn2").hide();
if(playGame)
{
    submitBtn.addEventListener('click',function(e)
    {
        e.preventDefault();
        var guess=parseInt(userInput.value);
        validateGuess(guess);
    });
    reset.addEventListener('click',function(e){
        e.preventDefault();
        guessNo.innerHTML='';
        remainingCount.innerHTML='';
        random.innerHTML='';
        lowHigh.innerHTML='';
        parentDiv.removeChild(newResetButton);
        previousGuesses = [];
    });
}
function validateGuess(guess)
{
    if(isNaN(guess)){
        alert('please enter number ');
    }
    else if(guess<1 || guess>100){
        alert('number must be in between 1 to 100');
    }
    else {
        previousGuesses.push(guess);
        if(numberGuess==5)
        {
            displayGuess(guess);
            endGame();
        }
```

```javascript
        else {
            displayGuess(guess);
            checkGuess(guess);
        }
    }
}
function displayGuess(guess)
{
    $("#btn2").show();
    guessNo.innerHTML+=' '+guess;
    userInput.value='';
    numberGuess++;
    remainingCount.innerHTML=6-numberGuess;
}
function checkGuess(guess)
{
    if(guess==randomNumber)
    {
        lowHigh.innerHTML='You guess correct number '+randomNumber;
    }
    else if(guess<randomNumber)
    {
        lowHigh.innerHTML='Too Low!Try again';
    }
    else if(guess>randomNumber)
    {
        lowHigh.innerHTML='Too High!Try again';
    }
}
function endGame()
{
    userInput.value='';
    userInput.setAttribute('disabled','');
    newResetButton.innerHTML='StartNewGame';
    newResetButton.id="newGame";
    parentDiv.appendChild(newResetButton);
    random.innerHTML='Random Number: '+randomNumber;
    $("#btn2").hide();
    newGame();
}
function newGame()
{
    document.getElementById('newGame').addEventListener('click',function()
    {
        numberGuess = 1;
        randomNumber=parseInt((Math.random()*100)+1);
        userInput.removeAttribute('disabled');
        guessNo.innerHTML='';
        remainingCount.innerHTML='';
        random.innerHTML='';
        lowHigh.innerHTML='';
        parentDiv.removeChild(newResetButton);
    });
}
```

Output:-

Guess the Number

Enter number	start Guess
Previous Guesses: 50 70 60 55 58	Remaining Count: 0

Too Low!Try again

Random Number: 56