

1. Create a basic calculator using HTML, CSS, and JavaScript with the functionality of add, subtract, multiply and divide. Use the following picture for reference.

```
<!DOCTYPE html>
<html>
  <head>
    <style>
      body {
        display: flex;
        justify-content: center;
        align-items: center;
        height: 100vh;
        margin: 0;
        background-color: #f2f2f2;
      }

      .calculator {
        background-color: #fff;
        border: 1px solid #ddd;
        border-radius: 5px;
        box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
        padding: 20px;
        text-align: center;
      }

      #display {
        width: 100%;
        height: 40px;
        font-size: 20px;
        margin-bottom: 10px;
      }

      .buttons {
        display: grid;
        grid-template-columns: repeat(4, 1fr);
        gap: 10px;
      }

      button {
        width: 100%;
        height: 40px;
        font-size: 20px;
        background-color: #337ab7;
        color: #fff;
        border: none;
        border-radius: 5px;
        cursor: pointer;
      }
```

```

        button:hover {
            background-color: #235a9f;
        }
    </style>
</head>
<body>
    <div class="calculator">
        <input type="text" id="display" disabled>
        <div class="buttons">
            <button onclick="clearDisplay()">C</button>
            <button onclick="appendToDisplay('7')">7</button>
            <button onclick="appendToDisplay('8')">8</button>
            <button onclick="appendToDisplay('9')">9</button>
            <button onclick="appendToDisplay('+')">+</button>
            <button onclick="appendToDisplay('4')">4</button>
            <button onclick="appendToDisplay('5')">5</button>
            <button onclick="appendToDisplay('6')">6</button>
            <button onclick="appendToDisplay('-')">-</button>
            <button onclick="appendToDisplay('1')">1</button>
            <button onclick="appendToDisplay('2')">2</button>
            <button onclick="appendToDisplay('3')">3</button>
            <button onclick="appendToDisplay('*')">*</button>
            <button onclick="appendToDisplay('0')">0</button>
            <button onclick="calculateResult()">=</button>
            <button onclick="appendToDisplay('/')">/</button>
        </div>
    </div>
    <script>
        let displayValue = '';

        function appendToDisplay(value) {
            displayValue += value;
            document.getElementById('display').value = displayValue;
        }

        function clearDisplay() {
            displayValue = '';
            document.getElementById('display').value = '';
        }

        function calculateResult() {
            try {
                const result = eval(displayValue);
                document.getElementById('display').value = result;
                displayValue = result.toString();
            } catch (error) {
                document.getElementById('display').value = 'Error';
                displayValue = '';
            }
        }
    </script>

```

```

    }
  }

</script>
</body>
</html>

```

2. Create a survey form with Fields; First Name, Last Name, Date of Birth, Country (dropdown), Gender (checkbox), Profession, email, and mobile number. All the input fields are necessary to submit the form. Create two buttons Submit and Reset. Reset will reset the form while clicking on submit, first, it will check all the fields and necessary validations and then a popup will appear displaying all the selected values with labels in front of it. On closing the popup, the form should reset all the values. Use the following image for reference.

```

<!DOCTYPE html>
<html>
<head>
  <style>
    body {
      display: flex;
      justify-content: center;
      align-items: center;
      height: 100vh;
      margin: 0;
      background-color: cornsilk;
    }

    .form-container {
      background-color: #fff;
      border: 1px solid #ccc;
      border-radius: 10px;
      padding: 20px;
      box-shadow: 0px 0px 10px rgba(0, 0, 0, 0.1);
      width: 500px;
    }

    .form-row {
      display: flex;
      justify-content: space-between;
      align-items: center;
      margin-bottom: 10px;
    }

    .form-row label {
      width: 40%;
      text-align: right;
    }
  </style>

```

```

    }

    .form-row #genderMale, .form-row #genderFemale{
        align-items: center;
        margin: auto;
        width: 15px;
        padding: 0%;
    }

    .form-row input, .form-row select {
        width: 45%;
        padding: 5px;
    }

    .form-row #country{
        width: 240px;
    }

    .form-buttons {
        text-align: center;
    }

    .form-buttons button {
        padding: 10px 20px;
        margin: 10px;
        background-color: #007bff;
        color: #fff;
        border: none;
        border-radius: 5px;
        cursor: pointer;
    }

    .form-buttons button:hover {
        background-color: #0056b3;
    }

</style>
</head>
<body>
    <div class="form-container">
        <form id="surveyForm" action="#" onsubmit="return submitForm();">
            <div class="form-row">
                <label for="firstName">First Name:</label>
                <input type="text" id="firstName" name="firstName" required>
            </div>

            <div class="form-row">
                <label for="lastName">Last Name:</label>

```

```

        <input type="text" id="lastName" name="lastName" required>
    </div>

    <div class="form-row">
        <label for="email">Email:</label>
        <input type="email" id="email" name="email" required>
    </div>

    <div class="form-row">
        <label for="dob">Date of Birth:</label>
        <input type="date" id="dob" name="dob" required>
    </div>

    <div class="form-row">
        <label for="gender">Gender:</label>
        <input type="checkbox" id="genderMale" name="gender"
value="Male"> Male
        <input type="checkbox" id="genderFemale" name="gender"
value="Female"> Female
    </div>

    <div class="form-row">
        <label for="country">Country:</label>
        <select id="country" name="country" required>
            <option value="India">India</option>
            <option value="USA">USA</option>
            <option value="Canada">Canada</option>
        </select>
    </div>

    <div class="form-row">
        <label for="profession">Profession:</label>
        <input type="text" id="profession" name="profession" required>
    </div>

    <div class="form-row">
        <label for="mobile">Mobile Number:</label>
        <input type="tel" id="mobile" name="mobile" required>
    </div>

    <div class="form-buttons">
        <button type="submit">Submit</button>
        <button type="button" onclick="resetForm()">Reset</button>
    </div>
</form>
</div>

<script>

```

```

function submitForm() {
    var firstName = document.getElementById("firstName").value;
    var lastName = document.getElementById("lastName").value;
    var email = document.getElementById("email").value;
    var dob = document.getElementById("dob").value;
    var country = document.getElementById("country").value;
    var gender =
document.querySelectorAll('input[name="gender"]:checked');
    var profession = document.getElementById("profession").value;
    var mobile = document.getElementById("mobile").value;

    if (gender.length === 0) {
        alert("Please select a gender.");
        return false;
    }

    var alertMessage = "First Name: " + firstName + "\n" +
        "Last Name: " + lastName + "\n" +
        "Email: " + email + "\n" +
        "Date of Birth: " + dob + "\n" +
        "Country: " + country + "\n" +
        "Gender: " + Array.from(gender).map(c =>
c.value).join(", ") + "\n" +
        "Profession: " + profession + "\n" +
        "Mobile Number: " + mobile;

    alert("Form submitted:\n" + alertMessage);

    resetForm();

    return false;
}

function resetForm() {
    document.getElementById("surveyForm").reset();
}
</script>
</body>
</html>

```