	Reg.	No:	221	12052
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Exno: 2b)	BMI Calculator using Javascript
Date:	

Aim:

To develop a BMI calculator using html tags, forms and css which contains images, and also linksto a different page.

Procedure:

Design the Layout:

• Add input fields for weight and height, a button to calculate BMI, and a display area for the result.

Style the Interface:

• Create a visually appealing design with a BMI meter indicating categories.

Implement Functionality:

- Use JavaScript to:
 - o Capture inputs, calculate BMI, and determine the category.
 - o Display the BMI value and category dynamically.

Test the Application:

• Validate inputs and check accuracy for various cases.

Enhance Features:

• Add animations, mobile responsiveness, and optional health tips.

Code:

Index.html

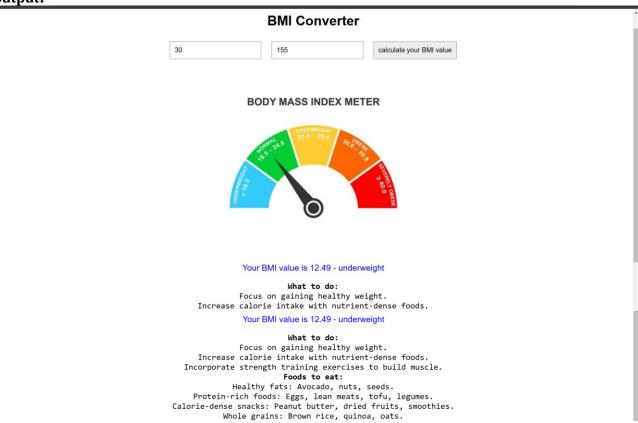
```
<!DOCTYPE html>
<html lang="en">
<head>
 <title>BMI Converter</title>
 <style>
  body {
   font-family: Arial, sans-serif;
   text-align: center;
   margin-top: 50px;
  input, button {
   padding: 10px;
   margin: 10px;
   font-size: 16px;
  #result {
   margin-top: 20px;
   font-size: 20px;
   color: blue;
```

```
}
  img{
   margin-left: 20%;
   margin-right: 20%;
  pre{
   color: black;
 </style>
</head>
<body>
 <h1>BMI Converter</h1>
 <input type="number" id="weight" placeholder="Enter Weight" />
 <input type="number" id="height" placeholder="Enter height" />
 <button onclick="calculateBMI()">calculate your BMI value</button>
 <img src="https://d3lzcn6mbbadaf.cloudfront.net/media/details/ANI-20241010093744.jpg" />
 <div id="result"></div>
 <script>
  function calculateBMI() {
   const weight = document.getElementById("weight").value;
   const height = document.getElementById("height").value/100;
   if (weight === "" && height==="") {
    document.getElementById("result").innerHTML = "Please enter a weight and height value.";
    return;
   let BMI = weight/(height*height);
   BMI = BMI.toFixed(2);
   if(BMI < 18.5)
    document.getElementById("result").innerHTML = `Your BMI value is ${BMI} -
underweight
     <b>What to do:</b>
Focus on gaining healthy weight.
Increase calorie intake with nutrient-dense foods.
Incorporate strength training exercises to build muscle.
<b>Foods to eat:</b>
Healthy fats: Avocado, nuts, seeds.
Protein-rich foods: Eggs, lean meats, tofu, legumes.
Calorie-dense snacks: Peanut butter, dried fruits, smoothies.
Whole grains: Brown rice, quinoa, oats.
`;
   }
   else if(BMI>=18.5 && BMI<=24.9){
    document.getElementById("result").innerHTML = `Your BMI value is ${BMI} - Normal
    <b>What to do:</b>
Maintain a balanced diet and regular physical activity.
Ensure adequate hydration and sleep.
```

```
Continue monitoring weight for stability.
<b>Foods to eat:</b>
Lean proteins: Chicken, fish, beans.
Fruits and vegetables: Include a variety of colors.
Healthy carbs: Sweet potatoes, whole-grain bread.
Healthy fats: Olive oil, nuts.
`;
   else if(BMI>=25.0 && BMI<=29.9){
    document.getElementById("result").innerHTML = `Your BMI value is ${BMI} -
OverWeight
<b>What to do:</b>
Aim for gradual weight loss with a calorie deficit.
Increase physical activity (e.g., brisk walking, jogging).
Avoid sugary and processed foods.
<b>Foods to eat:</b>
High-fiber foods: Vegetables, whole grains, legumes.
Lean proteins: Turkey, eggs, fish.
Low-calorie snacks: Carrots, cucumbers, fruits like apples.
Green tea and water for hydration.;
   else if(BMI>=30.0 && BMI<=39.9){
    document.getElementById("result").innerHTML = `Your BMI value is ${BMI} - Obese
<b>What to do:</b>
Consult a healthcare professional for guidance.
Start with light exercises (e.g., walking, yoga).
Opt for portion-controlled, low-calorie meals.
<b>Foods to eat:</b>
Leafy greens: Spinach, kale.
Lean proteins: Grilled chicken, fish.
Low-fat dairy: Greek yogurt, skim milk.
Avoid fried foods and sugary beverages.
`;
   }
   else{
    document.getElementById("result").innerHTML = `Your BMI value is ${BMI} - Severely
Obese
<b>What to do:</b>
Seek medical advice for personalized plans.
Consider a supervised diet and exercise regimen.
Address potential health risks like diabetes and hypertension.
<b>Foods to eat:</b>
High-fiber, low-calorie foods: Broccoli, cauliflower, lentils.
Healthy fats in moderation: Nuts, seeds.
Limit high-calorie foods and fast food.
Increase water intake.
`;
```

```
}
</script>
</body>
</html>
```

output:



Problem	Implementation	Time	Viva	Total
Understanding (5)	& Output (5)	Management (5)	(5)	(20)
(5)	(5)	(5)		

Result:

Thus the webpage for BMI calculator using html tags and css was created and the output was verified.