WEB DEVELOPMENT ASSIGNMENT REACT

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Task 1.)

Create a to do list app for daily activities where text showing the description of the todo-list item.

CODE:

```
import React, { useState } from 'react';
 function TodoApp() {   const [tasks,
setTasks] = useState([]);
  const [inputTask, setInputTask] = useState('');
   const handleChange = (event) => {
setInputTask(event.target.value);
  };    const handleSubmit = (event)
=> {     event.preventDefault();
if (inputTask.trim() !== '') {
setTasks([...tasks, inputTask]);
setInputTask('');
    }
  };
  const handleDelete = (index) => {
setTasks(tasks.filter((_, i) => i !== index));
  };
  return (
    <div style={{ fontFamily: 'Arial, sans-serif', textAlign: 'center' }}>
      <h1 style={{ marginBottom: '20px' }}>To-Do List</h1>
      <form onSubmit={handleSubmit} style={{ marginBottom: '20px' }}>
        <input           type="text"
value={inputTask}
onChange={handleChange}
placeholder="Enter task description"
style={{             padding: '10px',
fontSize: '16px',            marginRight:
'10px',
```

```
          }}
        />         <button
type="submit"           style={{
padding: '10px 20px',
fontSize: '16px',
backgroundColor: '#007bff',
color: '#fff',             border:
'none',             borderRadius:
'5px',             cursor: 'pointer',
          }}
        >
          Add Task
        </button>
      </form>
      <ul style={{ listStyle: 'none', padding: '0', marginLeft: '0' }}>
        {tasks.map((task, index) => (
          <li             key={index}
style={{               marginBottom: '10px',
padding: '10px',
backgroundColor: '#f4f4f4',
borderRadius: '5px',               display:
'flex',               justifyContent: 'space-
between',               alignItems: 'center',
            }}
          >
            <span>{task}</span>
            <button               onClick={() =>
handleDelete(index)}               style={{
padding: '5px 10px',
backgroundColor: '#dc3545',
color: '#fff',                 border: 'none',
borderRadius: '5px',                 cursor:
'pointer',
              }}
            >
              Delete
            </button>
          </li>
        ))}
      </ul>
```

```
    </div>
  );
}
export default TodoApp;
```

OUTPUT:

TASK 2: Create your class Time Table app using ReactJS.

CODE:

```
import React from 'react';
 class TimeTableApp extends React.Component
{   render() {     return (
      <div style={appStyle}>
        <h1 style={headerStyle}>Class Time Table</h1>
        <table style={tableStyle}>
          <thead>
            <tr style={tableCellStyle}>
              <th style={thStyle}>Time</th>
              <th style={thStyle}>Monday</th>
              <th style={thStyle}>Tuesday</th>
              <th style={thStyle}>Wednesday</th>
              <th style={thStyle}>Thursday</th>
              <th style={thStyle}>Friday</th>
            </tr>
          </thead>
          <tbody>
            <tr style={tableCellStyle}>
              <td style={thStyle}>9:00 - 10:00</td>
              <td style={thStyle}>Math</td>
              <td style={thStyle}>English</td>
              <td style={thStyle}>Science</td>
              <td style={thStyle}>History</td>
              <td style={thStyle}>Geography</td>
            </tr>
            <tr style={tableCellStyle}>
              <td style={thStyle}>10:00 - 11:00</td>
              <td style={thStyle}>Science</td>
<td style={thStyle}>Math</td>
              <td style={thStyle}>English</td>
              <td style={thStyle}>Science</td>
              <td style={thStyle}>History</td>
            </tr>
            <tr style={tableCellStyle}>
              <td style={thStyle}>11:00 - 12:00</td>
              <td style={thStyle}>History</td>
              <td style={thStyle}>Science</td>
<td style={thStyle}>Math</td>
              <td style={thStyle}>English</td>
              <td style={thStyle}>Science</td>
            </tr>
            <tr style={tableCellStyle}>
              <td style={thStyle}>12:00 - 13:00</td>
```

```
              <td style={thStyle}>Lunch</td>
              <td style={thStyle}>Lunch</td>
              <td style={thStyle}>Lunch</td>
              <td style={thStyle}>Lunch</td>
              <td style={thStyle}>Lunch</td>
            </tr>
            <tr style={tableCellStyle}>
              <td style={thStyle}>13:00 - 14:00</td>
              <td style={thStyle}>Geography</td>
              <td style={thStyle}>History</td>
              <td style={thStyle}>Science</td>
<td style={thStyle}>Math</td>
              <td style={thStyle}>English</td>
            </tr>
            <tr>
              <td style={thStyle}>14:00 - 15:00</td>
              <td style={thStyle}>English</td>
              <td style={thStyle}>Geography</td>
              <td style={thStyle}>History</td>
              <td style={thStyle}>Science</td>
              <td style={thStyle}>Math</td>
            </tr>
          </tbody>
        </table>
      </div>
    );
  }
}  const appStyle = {
fontFamily: 'Arial, sans-serif',
textAlign: 'center',   marginTop:
'50px',
};  const headerStyle
= {   fontSize:
'24px',
marginBottom: '20px',
};
const tableStyle = {
border:'1px solid red',
borderCollapse: 'collapse',
width: '80%',   margin: '0
auto',
};  const
tableCellStyle = {
```

```
  border: '1px solid blue',
padding: '8px',
};  const thStyle = {
border: '1px solid black',
  // backgroundColor: '#f2f2f2',
};  export default
TimeTableApp;
```

OUTPUT:

Class Time Table

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9:00 - 10:00	Math	English	Science	History	Geography
10:00 - 11:00	Science	Math	English	Science	History
11:00 - 12:00	History	Science	Math	English	Science
12:00 - 13:00	Lunch	Lunch	Lunch	Lunch	Lunch
13:00 - 14:00	Geography	History	Science	Math	English
14:00 - 15:00	English	Geography	History	Science	Math

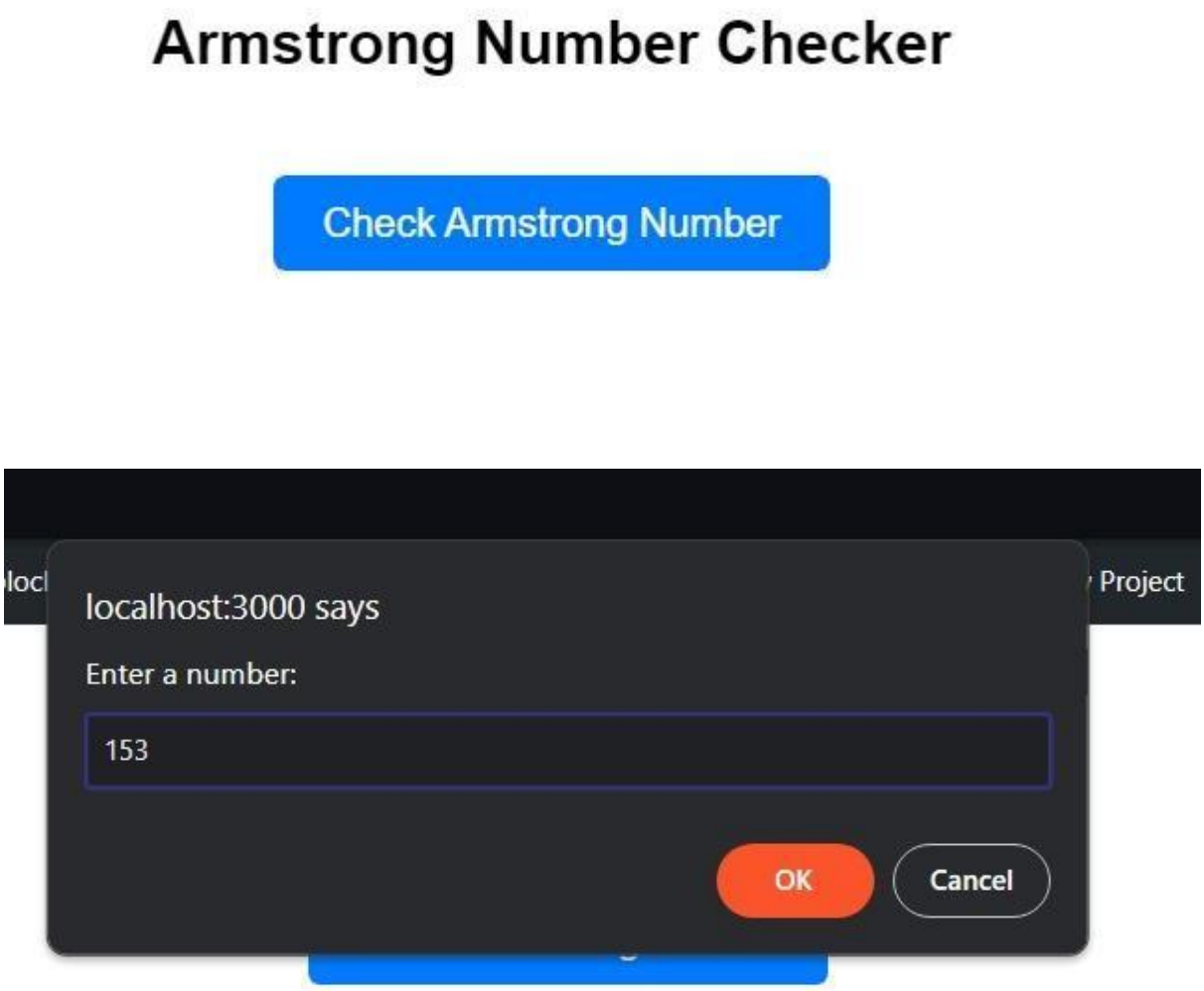
TASK-3.) Create an app to check whether a given number is Armstrong number or not. Note: Use Prompt input

CODE:

```
import React, { useState } from 'react';
 function ArmstrongApp() {   const [inputNumber,
setInputNumber] = useState('');   const [isArmstrong,
setIsArmstrong] = useState(null);
   const checkArmstrong = () => {
const number = parseInt(inputNumber);
let sum = 0;     let temp = number;
     while (temp > 0) {
const digit = temp % 10;       sum
+= digit ** 3;       temp =
Math.floor(temp / 10);
    }      setIsArmstrong(sum ===
number);
  };
  return (
    <div style={appStyle}>
      <h2>Armstrong Number Checker</h2>
      <div style={inputContainerStyle}>
        <label>Enter a number:</label>
        <input           type="number"
value={inputNumber}           onChange={(e) =>
setInputNumber(e.target.value)}
style={inputStyle}
        />
      </div>
      <button onClick={checkArmstrong} style={buttonStyle}>
        Check
      </button>
      {isArmstrong !== null && (
        <div style={resultStyle}>
          {isArmstrong ? `${inputNumber} is an Armstrong number` :
`${inputNumber} is not an Armstrong number`}
        </div>
      )}
    </div>
  );
}
```

```
 const appStyle = {   textAlign:
'center',   fontFamily: 'Arial,
sans-serif',   marginTop: '50px',
};  const
inputContainerStyle = {
marginBottom: '20px',
};  const inputStyle
= {   padding:
'5px',   marginLeft:
'10px',
};  const buttonStyle = {
padding: '10px 20px',
fontSize: '16px',
backgroundColor: '#007bff',
color: '#fff',   border:
'none',   borderRadius:
'5px',   cursor: 'pointer',
marginLeft: '10px',
};  const
resultStyle = {
marginTop: '20px',
fontWeight: 'bold',
};  export default
ArmstrongApp;
```

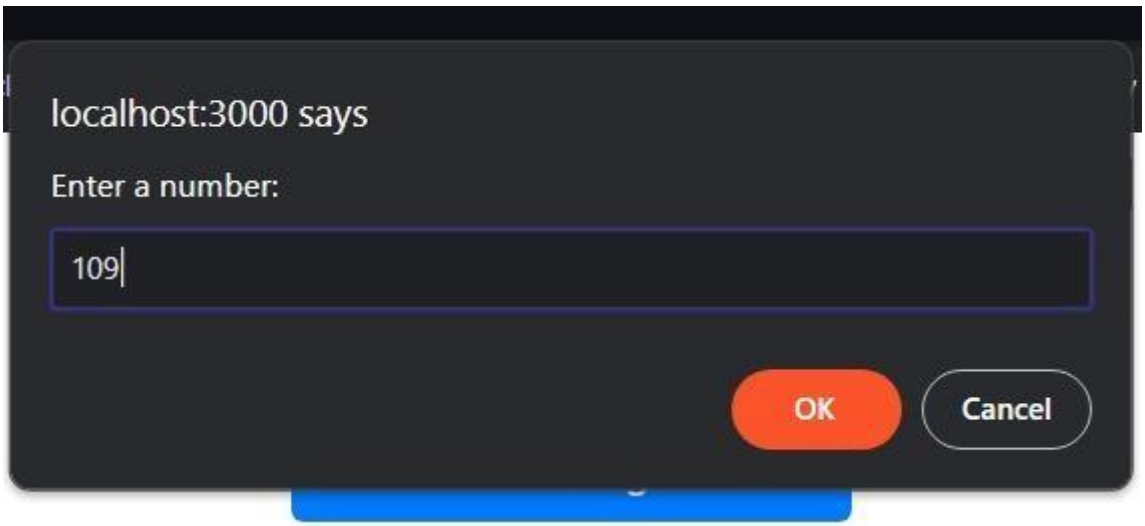
OUTPUT:


Armstrong Number Checker
Check Armstrong Number
localhost:3000 says
Enter a number:
153
OK
Cancel
Project

Armstrong Number Checker

Check Armstrong Number

The number is an Armstrong number



Armstrong Number Checker

Check Armstrong Number

The number is not an Armstrong number

TASK4.) Create your app (any computation like bills, tax …) which includes the following concepts • Functional Component • Class Component

CODE:

```
import React, { useState } from 'react';
 function BillCalculator() {   const [itemPrice,
setItemPrice] = useState('');   const [quantity,
setQuantity] = useState('');   const [total,
setTotal] = useState(0);
   const handleCalculate = () => {     const totalPrice =
parseFloat(itemPrice) * parseInt(quantity);
setTotal(totalPrice.toFixed(2));
  };
  return (
    <div style={calculatorStyle}>
      <h2>Bill Calculator</h2>
      <div style={inputContainerStyle}>
        <label>Item Price:</label>
        <input           type="number"
value={itemPrice}           onChange={(e) =>
setItemPrice(e.target.value)}
style={inputStyle}
        />
      </div>
      <div style={inputContainerStyle}>
        <label>Quantity:</label>
        <input
type="number"
value={quantity}
          onChange={(e) => setQuantity(e.target.value)}
style={inputStyle}
        />
      </div>
      <button onClick={handleCalculate} style={buttonStyle}>
        Calculate Total
      </button>
      <div style={totalStyle}>Total: ${total}</div>
    </div>
  );
}  class BillApp extends
React.Component {   render() {
return (
```

```
      <div style={appStyle}>
        <BillCalculator />
      </div>
    );
  }
}  const appStyle = {
textAlign: 'center',
fontFamily: 'Arial, sans-serif',
};  const calculatorStyle
= {   border: '2px solid
#333',   borderRadius:
'5px',   padding: '20px',
width: '300px',   margin:
'0 auto',
};  const
inputContainerStyle = {
marginBottom: '10px',
};  const inputStyle
= {   padding:
'5px',   marginLeft:
'10px',
};  const buttonStyle = {
padding: '10px 20px',
fontSize: '16px',
backgroundColor: '#007bff',
color: '#fff',   border:
'none',   borderRadius:
'5px',   cursor: 'pointer',
marginTop: '10px',
};
const totalStyle = {
marginTop: '20px',
fontWeight: 'bold',
};  export default
BillApp;
```

OUTPUT:


Bill Calculator
Item Price:
Quantity:
Calculate Total
Total: $0


Bill Calculator
Item Price:
450
Quantity:
10
Calculate Total
Total: $4500.00

TASK 5.) Create a app to display the cricket scoreboard of five player using Props concepts – (Functional and class components) Using State, Change the details of the runs and wickets for a cricketers listed below after an over / every 6 balls.

CODE:

```
import React, { useState } from 'react';
 function Player(props)
{   return (
    <div style={playerStyle}>
      <h2>{props.name}</h2>
      <p>Runs: {props.runs}</p>
      <p>Wickets: {props.wickets}</p>
    </div>
  );
}  function Score() {   const [players,
setPlayers] = useState([     { name: 'Player
1', runs: 0, wickets: 0 },
    { name: 'Player 2', runs: 0, wickets: 0 },
    { name: 'Player 3', runs: 0, wickets: 0 },
    { name: 'Player 4', runs: 0, wickets: 0 },
    { name: 'Player 5', runs: 0, wickets: 0 },
  ]);    const updateScore = () => {     const
updatedPlayers = players.map((player) => ({
      ...player,       runs: Math.floor(Math.random() * 7), // random runs
between 0 to 6       wickets: Math.floor(Math.random() * 2), // random
wickets between 0 to 1
    }));
setPlayers(updatedPlayers);
  };
  return (
    <div style={appStyle}>
      <h1>Cricket Scoreboard</h1>
      <button onClick={updateScore} style={buttonStyle}>Next Over</button>
      <div style={playersContainerStyle}>
        {players.map((player, index) => (
          <Player key={index} name={player.name} runs={player.runs}
wickets={player.wickets} />
        ))}
      </div>
    </div>
  );
}
```

```
 const appStyle = {   textAlign:
'center',   fontFamily: 'Arial,
sans-serif',
};  const playerStyle = {
border: '2px solid #333',
borderRadius: '5px',
padding: '10px',   margin:
'10px',   width: '200px',
  display: 'inline-block',
};  const buttonStyle = {
margin: '20px',   padding:
'10px 20px',   fontSize:
'16px',   backgroundColor:
'#007bff',   color: '#fff',
border: 'none',
borderRadius: '5px',
cursor: 'pointer',
};  const playersContainerStyle
= {   display: 'flex',
  justifyContent: 'center',
};  export default
Score;
```

OUTPUT:

TASK 6.) Creating a simple counter using React which increments or decrements count dynamically on-screen as the user clicks on the button. (Hint Use Hooks

CODE:

```
import React, { useState } from 'react';
 function Counter() {   const [count,
setCount] = useState(0);
   const increment = () =>
{     setCount(count + 1);
  };    const decrement =
() => {     setCount(count
- 1);
  };
  return (
    <div style={{ fontFamily: 'Arial, sans-serif', textAlign: 'center' }}>
      <h1>Counter</h1>
      <p>Count: {count}</p>
      <button onClick={increment} style={buttonStyle}>
        Increment
      </button>
      <button onClick={decrement} style={buttonStyle}>
        Decrement
      </button>
    </div>
  );
}
const buttonStyle = {
padding: '10px 20px',
fontSize: '16px',
margin: '10px',
  backgroundColor:
'#007bff',   color: '#fff',
border: 'none',
borderRadius: '5px',
cursor: 'pointer',
};  export default
Counter;
```

OUTPUT:


Counter
Count: 15
Increment
Decrement


Counter
Count: 7
Increment
Decrement


Counter
Count: 0
Increment
Decrement