

# Project 47



**DP**  
EDUCATION

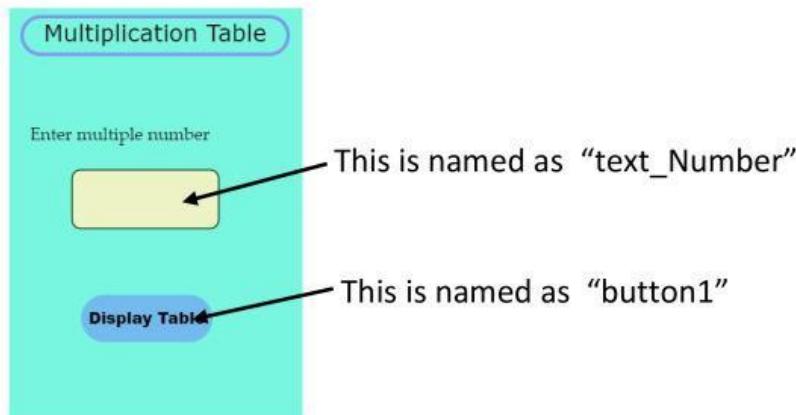
## Coding School

The image shows a mobile application interface. At the top, a purple rounded rectangle contains the text "Multiplication Table". Below this, a light blue rectangular area contains the placeholder text "Enter multiple number" and a yellow rectangular input field. In the center, a blue rounded rectangle contains the text "Display Table". At the bottom, a light blue rectangular area contains the text "Tap or click to run". At the very bottom, a dark grey footer bar contains three buttons: "How It Works", "Start Here" (which has a white arrow pointing to it), and "See the App" (which is preceded by a large white arrow). The footer also includes the text "Built on Code Studio ▾".

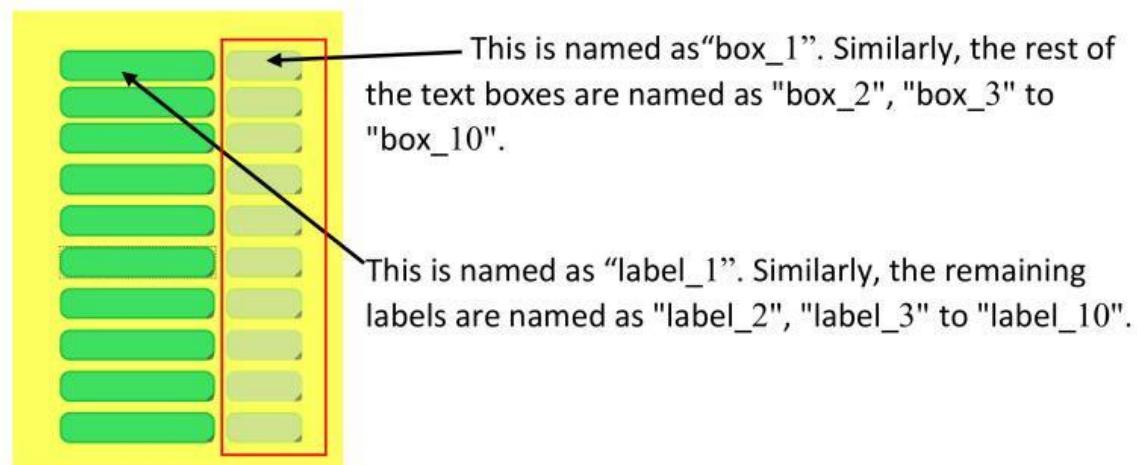
Everything required to create the multiplication table is designed as follows.

It is designed as follows with two screens.

The first screen is as follows .



The second screen is as follows.



Let's set up the multiplication table as follows.

- ❖ Let's set two variables as "Number1" and "answer" as follows.

```
var Number1 = 0;  
var answer = 0;
```

- ❖ Create an onEvent block as follows.

```
onEvent("button1", "click", function() {  
});
```

- ❖ Set a variable as below for the digit you entered in "text\_Number"

```
Number1 = getNumber("text_Number");
```

- ❖ Imagine the number to be entered as 5. Now the label should be displayed as "1 x 5". For that, set up the block as follows.

```
for (var i = 1; i <= 10; i++) {
  showElement("label_" + i);
  setText("label_" + i, i + " x " + Number1);
}
```

This block is used to show the hidden label.

The id of the label is given as "label\_1". This is `"label_" + i` used to give the id of the label to the id of showElement through the for loop. Then give the digit number as "label\_" text by "i" in the for loop.

This will display the number you write in "text\_Number", the multiplication mark and the numbers 1 to 10 from label\_1 to label\_10.

- ❖ The hidden label named "box\_" will be shown, and if the number you entered is 5, the answers related to the 5 times multiplication table will be displayed in the label named "box\_". For that, apply blocks as follows.

```
for (var Number2 = 1; Number2 <= 10; Number2++) {
  answer = Number1 * Number2;
  showElement("box_" + Number2);
  setNumber("box_" + Number2, answer);
}
```

The digit you entered will be multiplied by the corresponding digit in the labels from "label\_1" to "label\_10".

- ❖ When button1 is clicked, it should go to the screen called "screenHome" and for that, connect the setScreen block to the onEvent block

```
setScreen("screenHome");
```