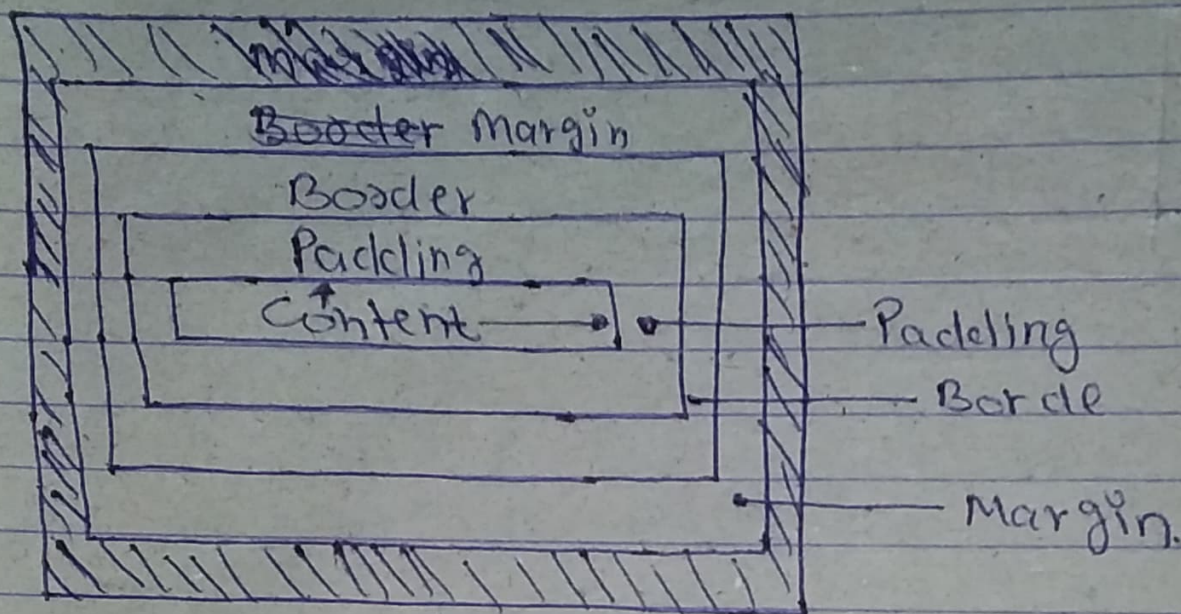# Chapter 3: CSS Box Model

The css box model looks at all the html elements as boxes.

Setting width and height

We can set width and height in css as follows

```
#box {
    height : 70 px;
    width : 70 px;
}
```

Note that the total width/height is calculated as follow.

Total height = height + Top/bottom padeling + Top/bottom border + Top/bottom margin.

Setting margin and padding

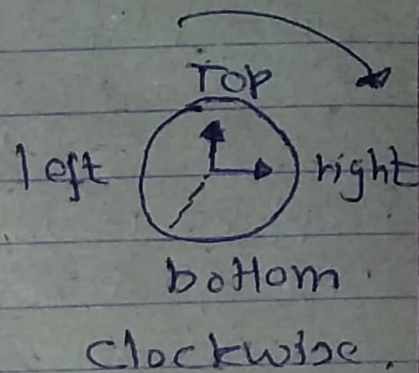we can set margin and padding as follows.

```
box {
    margin : 3px;        } sets top, bottom, left and
    padding : 4px;       } right values.
}
```

```
box main {
    margin : 7px  0px  2px  11px ;
}
           ↓     ↓     ↓     ↓
          Top  right bottom left
```


TOP
left ← ↑ → right
bottom

Clockwise

```
boxlast {
    margin : 7px  3px;
}
           ↓     ↓
    Top n bottom  left n right
```

"we can also set individual margins/paddings like this :

```
margin - top : 7opx       }
margin - bottom : 3px      }  Same goes with
margin - left : 8px.       }  padding.
margin - right : 9px       }
```

Setting Borders

We can set the border as follows:-

```
.bx {
    border-width : 2px
    border-style : solid;
    border-color : red;
}
```
} or just set border :
2px solid red;
(shorthand)

Border Radius

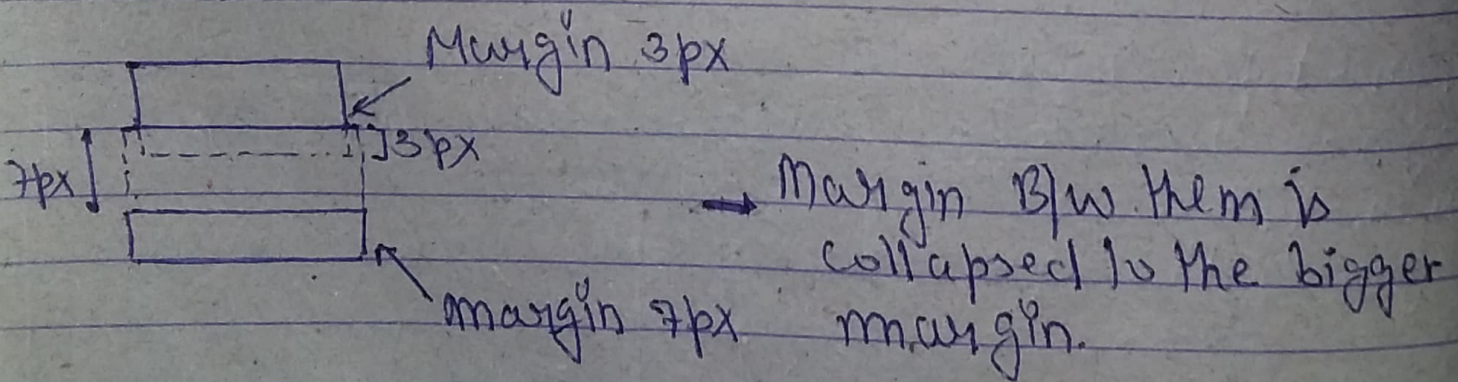We can set border radius to create rounded borders

```
div2 {
    border-radius : 7px;
}
```

Margin collapse

When two margins from different elements overlap, the equivalent margin is the greater of the two. This is called margin collapse.

Margin 3px

3px

7px

margin 7px

→ Margin B/w them is collapsed to the bigger margin.

Box Sizing

Determines what out of padding and border is included in elements - width and height.
Can be content - box or border - box

⌐ Include only content in width/height

```
div 1 {
    box-sizing: border-box;
}
```

⌐ The content width and ht. includes content + padding + border

× × × × ×

- In css, the term "box model" is used when talking about design and layout.
- The css box model is essentially a box that wraps around every HTML element. It consists of: It consists of - margins, borders, padding and the actual content.

   (1) content - The content of the box, where text and imgs appear

   (2) Padding - Clrs an area around the content. The padding is transparent

   (3) Border - A border that goes around the padding and content.

   (4) margin - Clrs an area outside the border. The margin is transparent.

Note: css Treat all elements of html as a box.