



ConstraintLayout

Library

group-id: "androidx.constraintlayout"

artifact-id: "constraintlayout-compose"

version: "1.1.0"

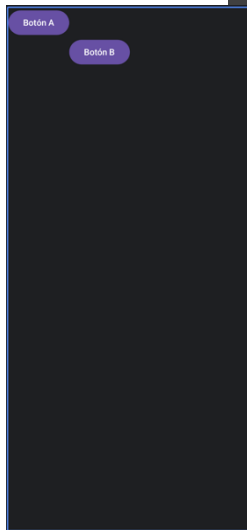


ConstraintLayout

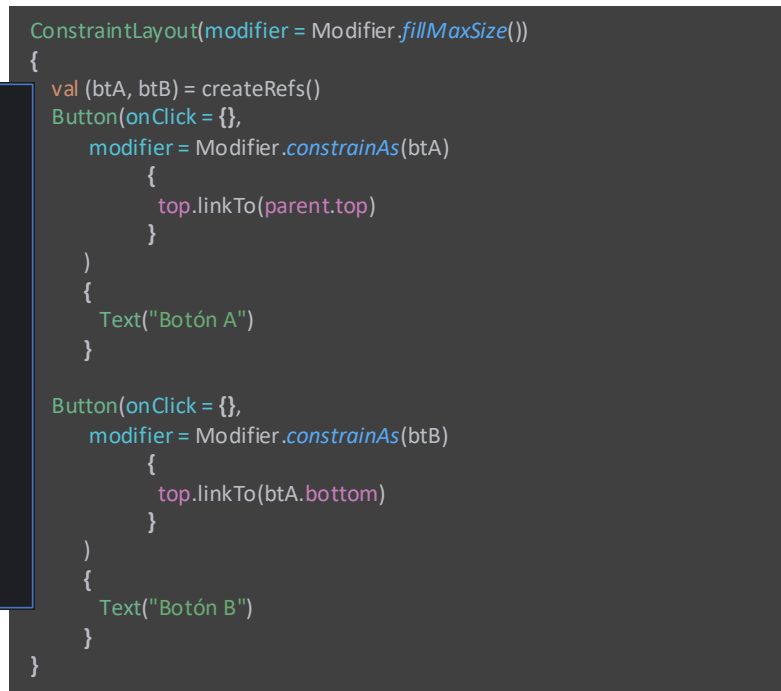
Align top edges



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val btA = createRef()
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
        }
    )
    {
        Text("Botón A")
    }
}
```



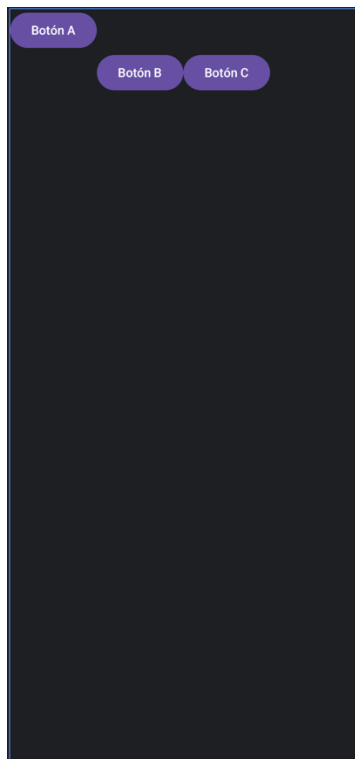
```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
        }
    )
    {
        Text("Botón A")
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            top.linkTo(btA.bottom)
        }
    )
    {
        Text("Botón B")
    }
}
```





ConstraintLayout

Align top edges



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()

    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
        }
    ) { Text("Botón A") }

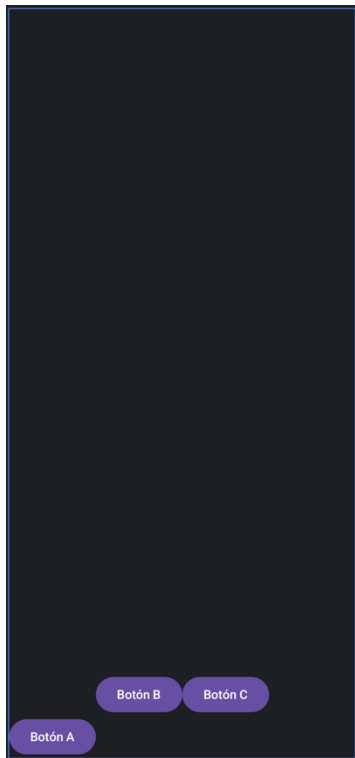
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            top.linkTo(btA.bottom)
        }
    ) { Text("Botón B") }

    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            top.linkTo(btB.top)
        }
    ) { Text("Botón C") }
}
```



ConstraintLayout

Align bottom edges



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()

    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            bottom.linkTo(parent.bottom)
        }
    ) { Text("Botón A") }

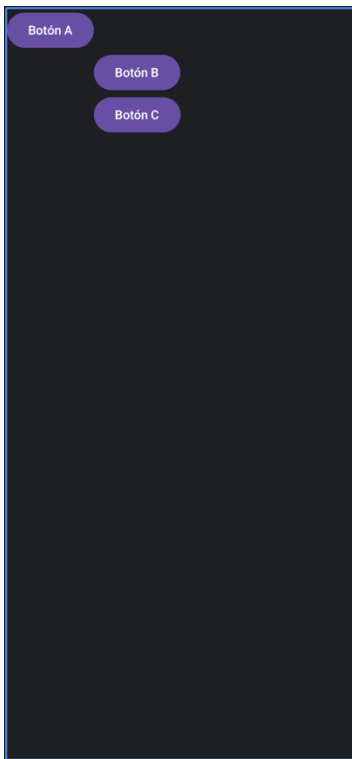
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            bottom.linkTo(btA.top)
        }
    ) { Text("Botón B") }

    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            bottom.linkTo(btB.bottom)
        }
    ) { Text("Botón C") }
}
```



ConstraintLayout

Align start edges



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            start.linkTo(parent.start)
        }
    ) { Text("Botón A") }

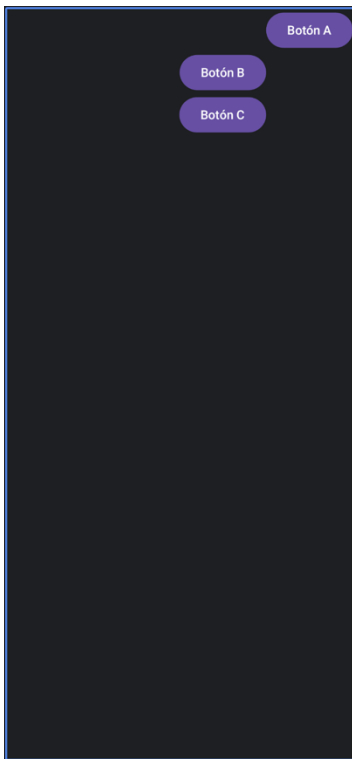
    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
        {
            top.linkTo(btA.bottom)
            start.linkTo(btA.end)
        }
    ) { Text("Botón B") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btC)
        {
            top.linkTo(btB.bottom)
            start.linkTo(btB.start)
        }
    ) { Text("Botón C") }
}
```



ConstraintLayout

Align end edges



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC, btD) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            end.linkTo(parent.end)
        }
    ) { Text("Botón A") }

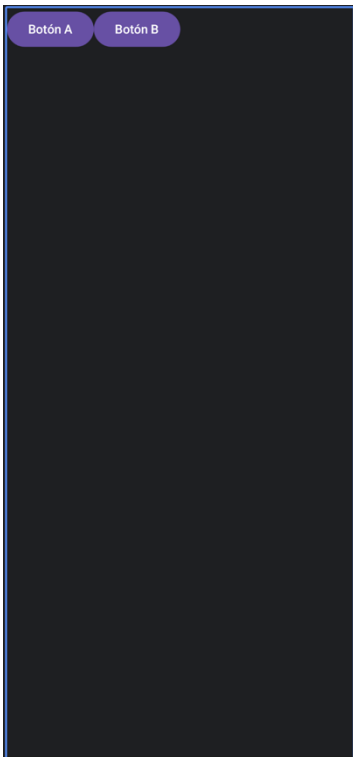
    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
        {
            top.linkTo(btA.bottom)
            end.linkTo(btA.start)
        }
    ) { Text("Botón B") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btC)
        {
            top.linkTo(btB.bottom)
            end.linkTo(btB.end)
        }
    ) { Text("Botón C") }
}
```



ConstraintLayout

Align Baseline 



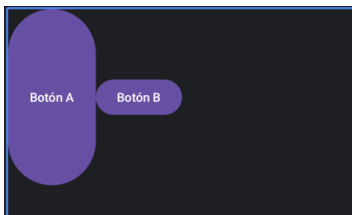
```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
    {
        top.linkTo(parent.top)
        start.linkTo(parent.start)
    }) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        baseline.linkTo(btA.baseline)
        start.linkTo(btA.end)
    }) { Text("Botón B") }
}
```



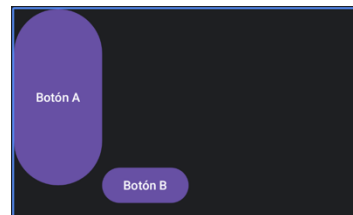
ConstraintLayout

Align vertical centers



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.size(width = 100.dp,
        height = 200.dp)
        .constrainAs(btA)
        {
            top.linkTo(parent.top)
            start.linkTo(parent.start)
        }
    ) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        top.linkTo(btA.top)
        bottom.linkTo(btA.bottom)
        start.linkTo(btA.end)
    }
    ) { Text("Botón B") }
}
```



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.size(width = 100.dp,
        height = 200.dp)
        .constrainAs(btA)
        {
            top.linkTo(parent.top)
            start.linkTo(parent.start)
        }
    ) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        top.linkTo(btA.bottom)
        bottom.linkTo(btA.bottom)
        start.linkTo(btA.end)
    }
    ) { Text("Botón B") }
}
```




ConstraintLayout

Align horizontal centers



Botón A

Botón B

```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.size(width = 200.dp,
        height = 80.dp)
        .constrainAs(btA)
        {
            top.linkTo(parent.top)
            start.linkTo(parent.start)
        }
    ) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        start.linkTo(btA.start)
        end.linkTo(btA.end)
        top.linkTo(btA.bottom)
    }
    ) { Text("Botón B") }
}
```

Botón A

Botón B

```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.size(width = 200.dp,
        height = 80.dp)
        .constrainAs(btA)
        {
            top.linkTo(parent.top)
            start.linkTo(parent.start)
        }
    ) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        start.linkTo(btA.end)
        end.linkTo(btA.end)
        top.linkTo(btA.bottom)
    }
    ) { Text("Botón B") }
}
```

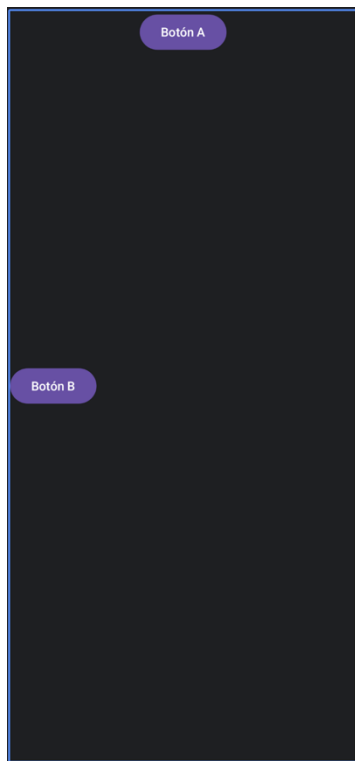


ConstraintLayout

Center horizontally in parent



Center vertically in parent



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            start.linkTo(parent.start)
            end.linkTo(parent.end)
            horizontalBias = 0.5f
        }
    ) { Text("Botón A") }

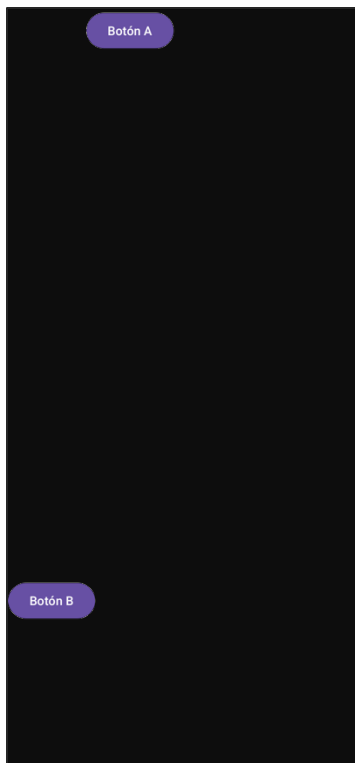
    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
        {
            start.linkTo(parent.start)
            top.linkTo(parent.top)
            bottom.linkTo(parent.bottom)
            verticalBias = 0.5f
        }
    ) { Text("Botón B") }
}
```



ConstraintLayout

Center horizontally in parent  with

bias
Center vertically in parent  with
bias



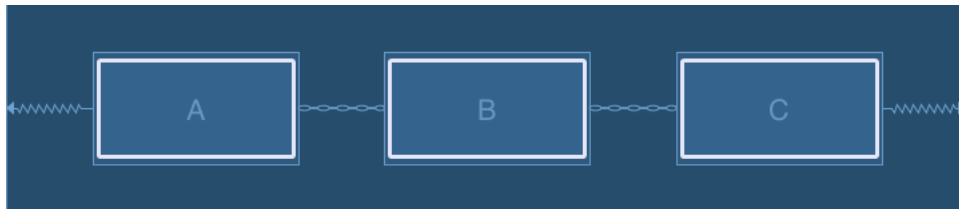
```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
    {
        top.linkTo(parent.top)
        start.linkTo(parent.start)
        end.linkTo(parent.end)
        horizontalBias = 0.3f
    }) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        start.linkTo(parent.start)
        top.linkTo(parent.top)
        bottom.linkTo(parent.bottom)
        verticalBias = 0.8f
    }) { Text("Botón B") }
}
```

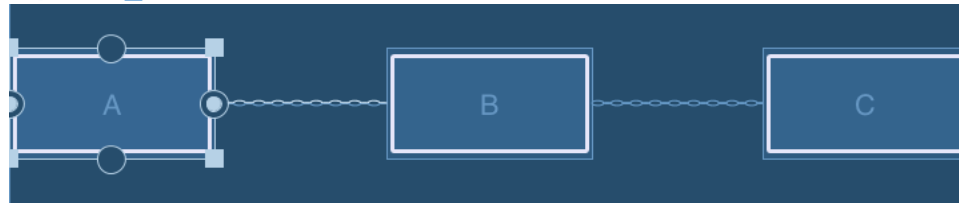
ConstraintLayout

Horizontal Chain 

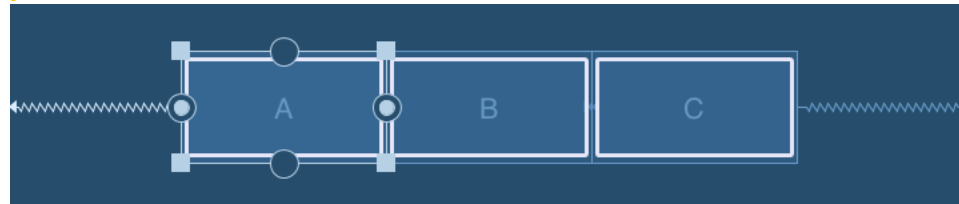
spread



spread_inside



packed





ConstraintLayout

Horizontal Chain

spread



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val horizontalChain = createHorizontalChain(btA, btB, btC, chainStyle = ChainStyle.Spread)
    constrain( horizontalChain )
    {
        start.linkTo(parent.start, 50.dp)
        end.linkTo(parent.end, 50.dp)
    }

    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            bottom.linkTo(parent.bottom)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("C") }
}
```



ConstraintLayout

Horizontal Chain

spread + weight



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val horizontalChain = createHorizontalChain(btA, btB, btC, chainStyle = ChainStyle.Spread)
    constrain( horizontalChain )
    {
        start.linkTo(parent.start, 50.dp)
        end.linkTo(parent.end, 50.dp)
    }

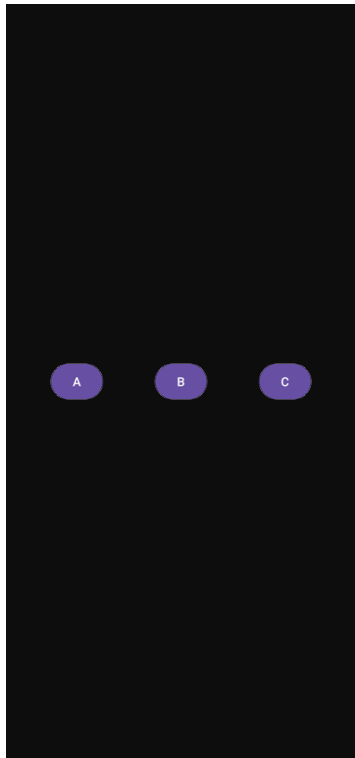
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top);
            bottom.linkTo(parent.bottom)
            width = Dimension.fillToConstraints; horizontalChainWeight = 1f
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("C") }
}
```



ConstraintLayout

Horizontal Chain

spread inside



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val horizontalChain = createHorizontalChain(btA, btB, btC, chainStyle = ChainStyle.SpreadInside)
    constrain( horizontalChain )
    {
        start.linkTo(parent.start, 50.dp)
        end.linkTo(parent.end, 50.dp)
    }

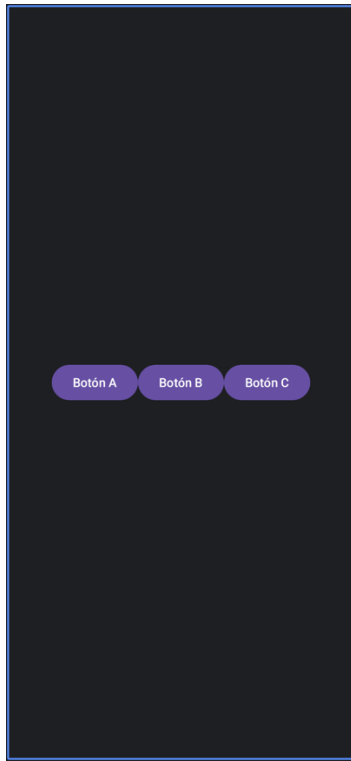
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            bottom.linkTo(parent.bottom)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("C") }
}
```



ConstraintLayout

Horizontal Chain

packed



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val horizontalChain = createHorizontalChain(btA, btB, btC, chainStyle = ChainStyle.Packed)
    constrain( horizontalChain )
    {
        start.linkTo(parent.start, 50.dp)
        end.linkTo(parent.end, 50.dp)
    }

    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            bottom.linkTo(parent.bottom)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("C") }
}
```




ConstraintLayout

Horizontal Chain

packed + bias

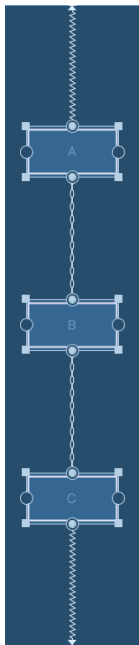


```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val horizontalChain = createHorizontalChain(btA, btB, btC, chainStyle = ChainStyle.Packed)
    constrain( horizontalChain )
    {
        start.linkTo(parent.start, 50.dp)
        end.linkTo(parent.end, 50.dp)
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            top.linkTo(parent.top)
            bottom.linkTo(parent.bottom)
            horizontalBias = 1f
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            baseline.linkTo(btA.baseline)
        }
    ) { Text("C") }
}
```

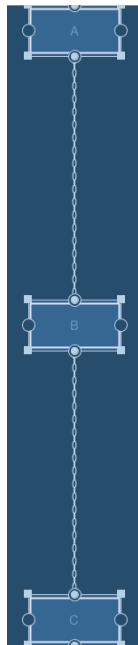
ConstraintLayout

Vertical Chain 

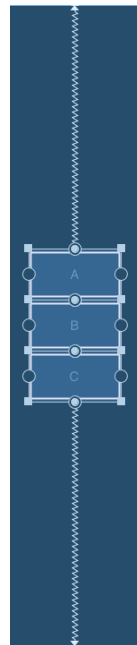
spread



spread_inside



packed

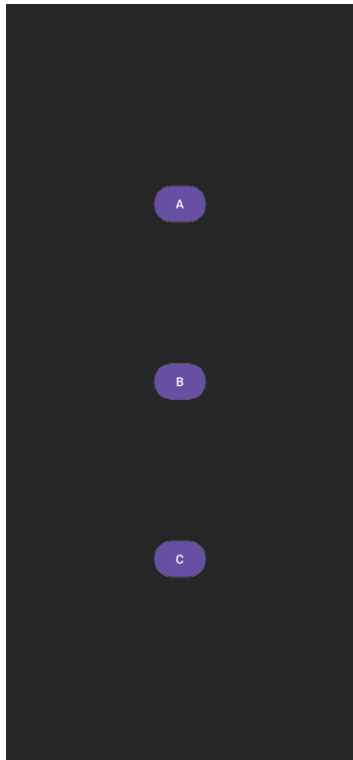




ConstraintLayout

Vertical Chain

spread



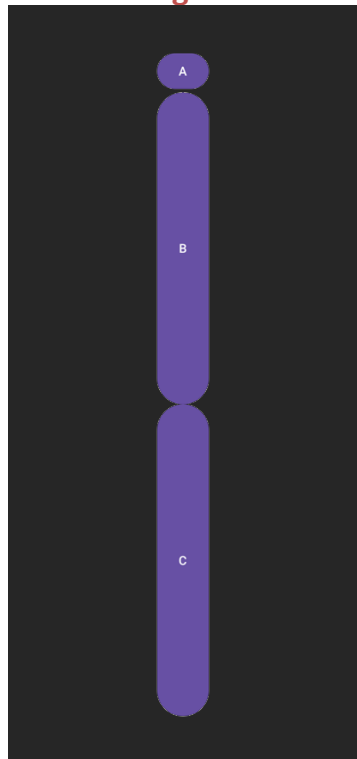
```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val verticalChain = createVerticalChain(btA, btB, btC, chainStyle = ChainStyle.Spread)
    constrain( verticalChain )
    {
        top.linkTo(parent.top, 50.dp)
        bottom.linkTo(parent.bottom, 50.dp)
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            start.linkTo(parent.start); end.linkTo(parent.end)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            start.linkTo(btA.start)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            start.linkTo(btA.start)
        }
    ) { Text("C") }
}
```



ConstraintLayout

Vertical Chain

spread + weight



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val verticalChain = createVerticalChain(btA, btB, btC, chainStyle = ChainStyle.Spread)
    constrain( verticalChain )
    {
        top.linkTo(parent.top, 50.dp)
        bottom.linkTo(parent.bottom, 50.dp)
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            start.linkTo(parent.start); end.linkTo(parent.end)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            start.linkTo(btA.start)
            height = Dimension.fillToConstraints; verticalChainWeight = 0.5f
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            start.linkTo(btA.start)
            height = Dimension.fillToConstraints; verticalChainWeight = 0.5f
        }
    ) { Text("C") }
}
```

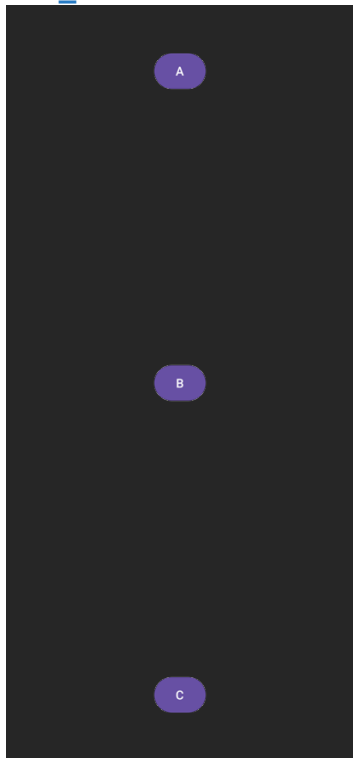


ConstraintLayout

Vertical Chain

2

spread_inside



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val verticalChain = createVerticalChain(btA, btB, btC, chainStyle = ChainStyle.SpreadInside)
    constrain( verticalChain )
    {
        top.linkTo(parent.top, 50.dp)
        bottom.linkTo(parent.bottom, 50.dp)
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            start.linkTo(parent.start); end.linkTo(parent.end)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            start.linkTo(btA.start)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            start.linkTo(btA.start)
        }
    ) { Text("C") }
}
```



ConstraintLayout

Vertical Chain

packed



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val verticalChain = createVerticalChain(btA, btB, btC, chainStyle = ChainStyle.Packed)
    constrain( verticalChain )
    {
        top.linkTo(parent.top, 50.dp)
        bottom.linkTo(parent.bottom, 50.dp)
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            start.linkTo(parent.start); end.linkTo(parent.end)
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            start.linkTo(btA.start)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            start.linkTo(btA.start)
        }
    ) { Text("C") }
}
```



ConstraintLayout

Vertical Chain

packed + bias



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    val verticalChain = createVerticalChain(btA, btB, btC, chainStyle = ChainStyle.Packed)
    constrain( verticalChain )
    {
        top.linkTo(parent.top, 50.dp)
        bottom.linkTo(parent.bottom, 50.dp)
    }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btA)
        {
            start.linkTo(parent.start); end.linkTo(parent.end)
            verticalBias = 0f
        }
    ) { Text("A") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btB)
        {
            start.linkTo(btA.start)
        }
    ) { Text("B") }
    Button(onClick = {},
        modifier = Modifier.constrainAs(btC)
        {
            start.linkTo(btA.start)
        }
    ) { Text("C") }
}
```



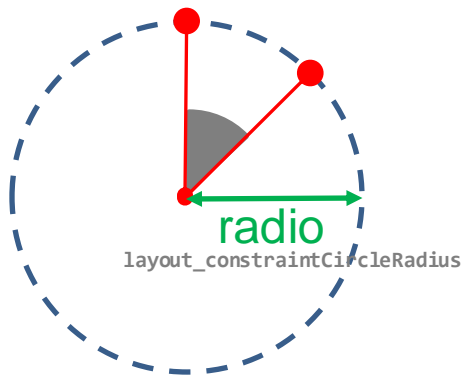
ConstraintLayout

Align circle



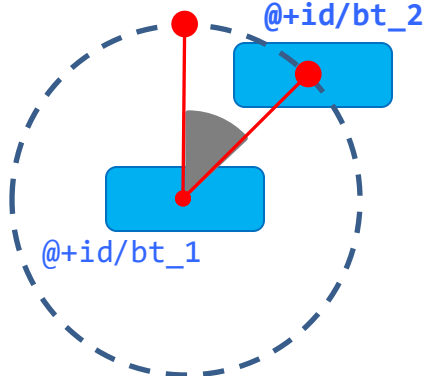
ángulo

layout_constraintCircleAngle



layout_constraintCircleRadius

@+id/bt_2



@+id/bt_1

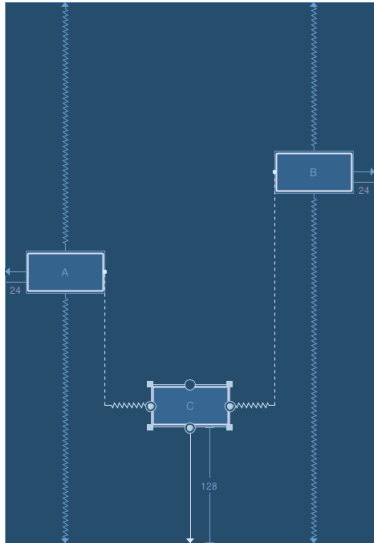
```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
        {
            centerTo(parent)
        }
    ) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
        {
            circular(btA, 45f, 100.dp)
        }
    ) { Text("Botón B") }
}
```




ConstraintLayout

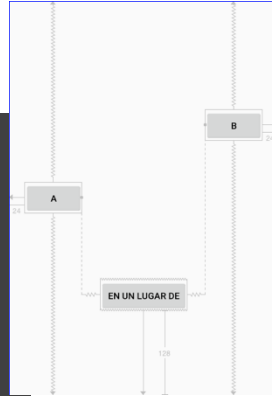
Dimensions



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
    {
        centerVerticallyTo(other = parent, bias = 0.5f)
        start.linkTo(anchor = parent.start, margin = 24.dp)
    }) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        centerVerticallyTo(other = parent, bias = 0.25f)
        end.linkTo(anchor = parent.end, margin = 24.dp)
    }) { Text("Botón B") }

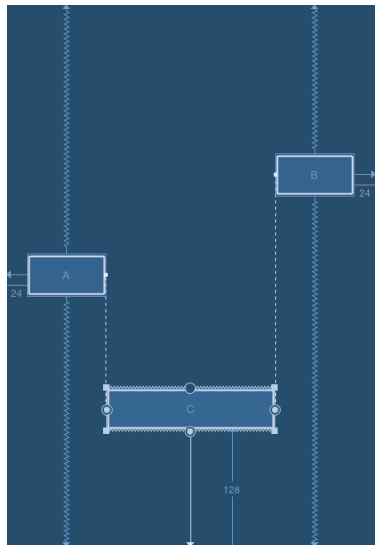
    Button(onClick = {}, modifier = Modifier.constrainAs(btC)
    {
        start.linkTo(btA.end)
        end.linkTo(btB.start)
        bottom.linkTo(anchor = parent.bottom, margin = 128.dp)
        width = Dimension.preferredWrapContent
    }) { Text("Botón C") }
}
```





ConstraintLayout

Dimensions



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
    {
        centerVerticallyTo(other = parent, bias = 0.5f)
        start.linkTo(anchor = parent.start, margin = 24.dp)
    }) { Text("Botón A") }

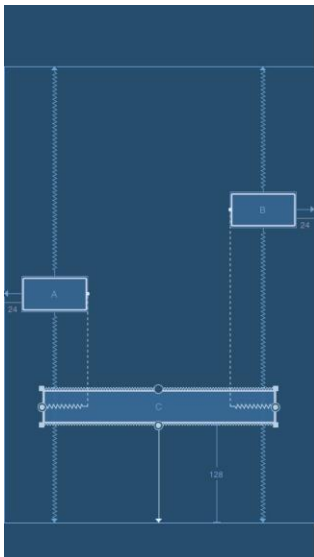
    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
    {
        centerVerticallyTo(other = parent, bias = 0.25f)
        end.linkTo(anchor = parent.end, margin = 24.dp)
    }) { Text("Botón B") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btC)
    {
        start.linkTo(btA.end)
        end.linkTo(btB.start)
        bottom.linkTo(anchor = parent.bottom, margin = 128.dp)
        width = Dimension.fillToConstraints
    }) { Text("Botón C") }
}
```



ConstraintLayout

Dimensions



```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val (btA, btB, btC) = createRefs()
    Button(onClick = {}, modifier = Modifier.constrainAs(btA)
        {
            centerVerticallyTo(other = parent, bias = 0.5f)
            start.linkTo(anchor = parent.start, margin = 24.dp)
        }
    ) { Text("Botón A") }

    Button(onClick = {}, modifier = Modifier.constrainAs(btB)
        {
            centerVerticallyTo(other = parent, bias = 0.25f)
            end.linkTo(anchor = parent.end, margin = 24.dp)
        }
    ) { Text("Botón B") }

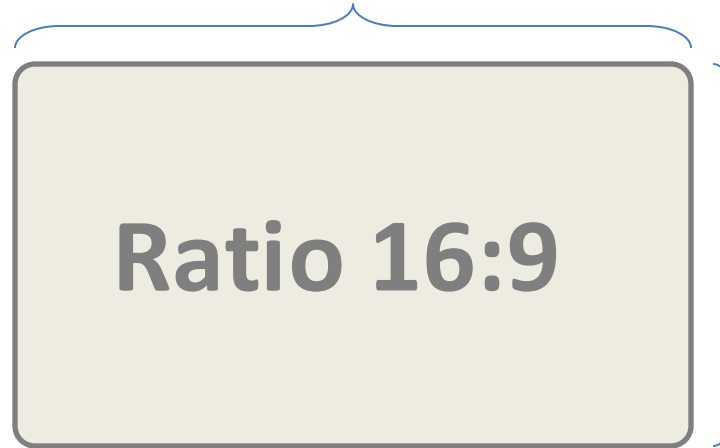
    Button(onClick = {}, modifier = Modifier.constrainAs(btC)
        {
            start.linkTo(btA.end)
            end.linkTo(btB.start)
            bottom.linkTo(anchor = parent.bottom, margin = 128.dp)
            width = Dimension.percent(0.7f)
        }
    ) { Text("Botón C") }
}
```



ConstraintLayout

Dimensions · ratio

16 unidades



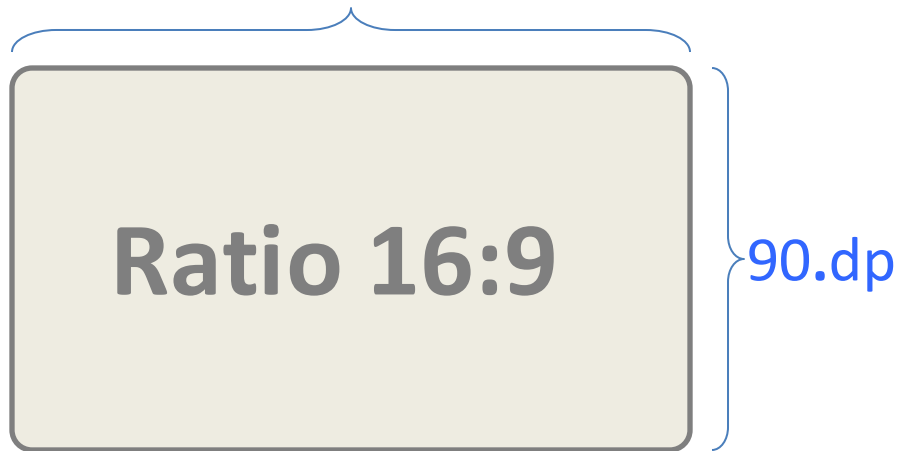
Ratio 16:9

9 unidades



ConstraintLayout

Dimensions · ratio



```
Button(onClick = {}, modifier = Modifier.constrainAs(btRatio)
{
    centerTo(parent)
    height = Dimension.value(90.dp)
    width = Dimension.ratio("w,16:9")
}) { Text(" Ratio 16:9") }
```



ConstraintLayout

Dimensions · ratio

160.dp

Ratio 16:9

```
Button(onClick = {}, modifier = Modifier.constrainAs(btRatio)
{
    centerTo(parent)
    height = Dimension.ratio("h,16:9")
    width = Dimension.value(160.dp)
}) { Text("Ratio 16:9") }
```



ConstraintLayout

Guidelines

```
ConstraintLayout(modifier = Modifier.fillMaxSize())
{
    val verticalGuide20dpFromStart = createGuidelineFromStart(20.dp)
    val verticalGuide20percentFromStart = createGuidelineFromStart(0.2f)
    val verticalGuide20dpFromEnd = createGuidelineFromEnd(20.dp)
    val verticalGuide20percentFromEnd = createGuidelineFromEnd(0.2f)

    val horizontalGuide40dpFromTop = createGuidelineFromTop(40.dp)
    val horizontalGuide40percentFromTop = createGuidelineFromTop(0.4f)
    val horizontalGuide40dpFromBottom = createGuidelineFromBottom(40.dp)
    val horizontalGuide40percentFromBottom = createGuidelineFromBottom(0.4f)

    val bt = createRef()

    Button(onClick = {}, modifier = Modifier.constrainAs(bt)
        {
            start.linkTo(verticalGuide20percent)
            end.linkTo(verticalGuide20percentFromEnd)

            top.linkTo(horizontalGuide40percentFromTop)
            bottom.linkTo(horizontalGuide40percentFromBottom)

            width = Dimension.fillToConstraints
            height = Dimension.fillToConstraints
        }
    )
}
```