02.自动布局子视图

ViewController.h

@interface ViewController : UIViewController

{

//创建父视图对象

UIView\* \_superView;

//左上角label

UILabel\* \_label01;

//右上角label

UILabel\* \_label02;

//右下角

UILabel\* \_label03;

//左下角

UILabel\* \_label04;

//居中视图

UIView\* \_viewCenter;

}

@end

ViewController.m

@implementation ViewController

- (void)viewDidLoad {

[super viewDidLoad];

// Do any additional setup after loading the view, typically from a nib.

\_superView = [[UIView alloc]init];

\_superView.frame = CGRectMake(20, 20, 180, 280);

\_superView.backgroundColor =[UIColor blueColor];

\_label01 = [[UILabel alloc]init];

//位置相对于父视图

\_label01.frame = CGRectMake(0, 0, 40, 40);

\_label01.text = @"1";

\_label01.backgroundColor = [UIColor greenColor];

\_label02 = [[UILabel alloc]init];

\_label02.frame = CGRectMake(180-40, 0, 40, 40);

\_label02.text = @"2";

\_label02.backgroundColor = [UIColor greenColor];

\_label03 = [[UILabel alloc]init];

\_label03.frame = CGRectMake(180-40, 280-40, 40, 40);

\_label03.text = @"3";

\_label03.backgroundColor = [UIColor greenColor];

\_label04 = [[UILabel alloc]init];

\_label04.frame = CGRectMake(0, 280-40, 40, 40);

\_label04.text = @"4";

\_label04.backgroundColor = [UIColor greenColor];

[\_superView addSubview:\_label01];

[\_superView addSubview:\_label02];

[\_superView addSubview:\_label03];

[\_superView addSubview:\_label04];

[self.view addSubview:\_superView];

\_viewCenter = [[UIView alloc]init];

\_viewCenter.frame = CGRectMake(0, 0, \_superView.bounds.size.width, 40);

\_viewCenter.center = CGPointMake(180/2, 280/2);

\_viewCenter.backgroundColor = [UIColor orangeColor];

[\_superView addSubview:\_viewCenter];

//动画效果

[UIView beginAnimations:nil context:nil];

[UIView setAnimationDuration:1];

//自动布局，设置距离相对父视图的左右上下边距的比例变化，边长也相对父视图的比例变化

//右上角子视图，左侧变化了，其他没变

\_label02.autoresizingMask = UIViewAutoresizingFlexibleLeftMargin;

//右下角子视图，左侧上侧变化

\_label03.autoresizingMask = UIViewAutoresizingFlexibleLeftMargin|UIViewAutoresizingFlexibleTopMargin;

//左下角子视图，上侧变化

\_label04.autoresizingMask = UIViewAutoresizingFlexibleTopMargin;

//中间子视图，宽度变化，上下侧都变化

\_viewCenter.autoresizingMask = UIViewAutoresizingFlexibleTopMargin|UIViewAutoresizingFlexibleWidth|UIViewAutoresizingFlexibleBottomMargin;

//动画结束

[UIView commitAnimations];

}

-(void)touchesBegan:(NSSet<UITouch \*> \*)touches withEvent:(UIEvent \*)event

{

static BOOL isLarge = NO;

//开始动画

[UIView beginAnimations:nil context:nil];

//动画时间

[UIView setAnimationDuration:1];

if(isLarge == NO)

{

//touch触发变大事件

\_superView.frame = CGRectMake(10, 10, 300, 400);

}

else

{

//触发变小事件

\_superView.frame = CGRectMake(20, 20, 180, 280);

}

//结束时修改isLarge值

isLarge = !isLarge;

//动画结束

[UIView commitAnimations];

}