

Day20(0609)

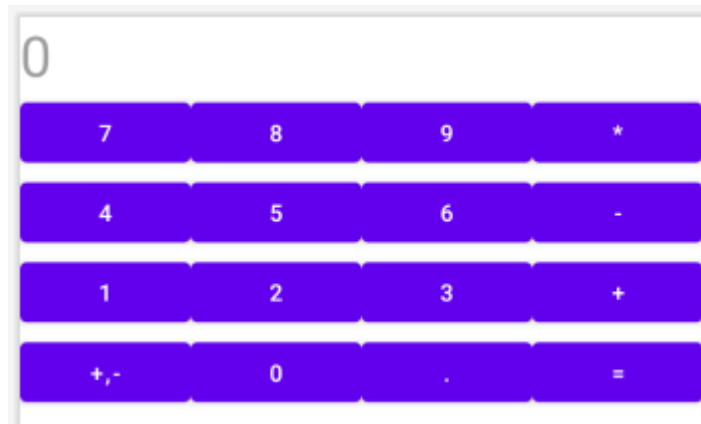
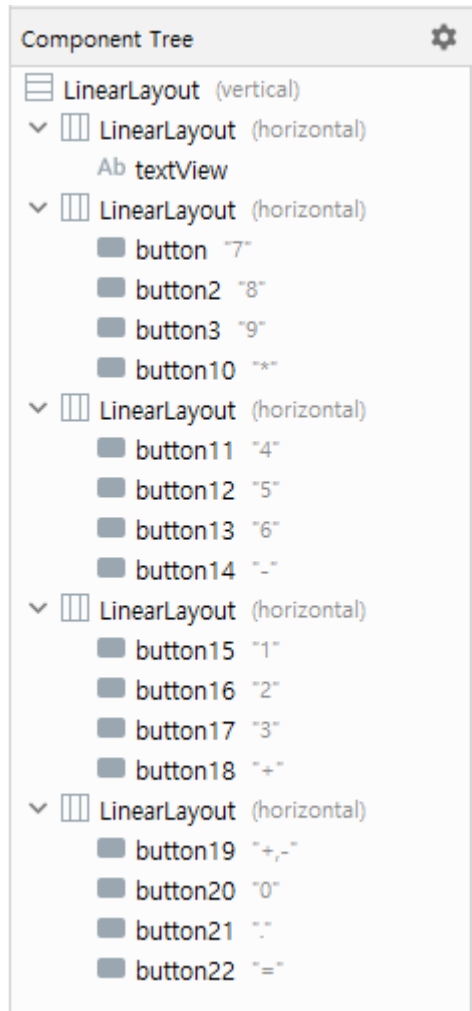
Day19(0608) 리뷰

Day19(0608)

- 레이아웃 연습
 - 계산기
- 인텐트 실행
- 기본위젯
 - 버튼
 - 라디오
 - 체크박스
 - 실습: 색상변경

Day19(0608)

- 레이아웃 연습



Day19(0608)

• 레이아웃 연습

```
setContentView(R.layout.calc_layout);
```

```
Button plus = findViewById(R.id.button18);  
Button minus = findViewById(R.id.button14);  
Button multi = findViewById(R.id.button10);  
Button enter = findViewById(R.id.button22);
```

```
Button n1 = findViewById(R.id.button15);  
Button n2 = findViewById(R.id.button16);  
Button n3 = findViewById(R.id.button17);  
Button n4 = findViewById(R.id.button11);  
Button n5 = findViewById(R.id.button12);  
Button n6 = findViewById(R.id.button13);  
Button n7 = findViewById(R.id.button);  
Button n8 = findViewById(R.id.button2);  
Button n9 = findViewById(R.id.button3);  
Button n0 = findViewById(R.id.button20);
```

```
n1.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View view) { o1 = Integer.valueOf( n1.getText().toString()); //1; }  
});
```

```
plus.setOnClickListener(new View.OnClickListener() {  
    @Override  
    public void onClick(View view) { op = 0; }  
});
```

Day19(0608)

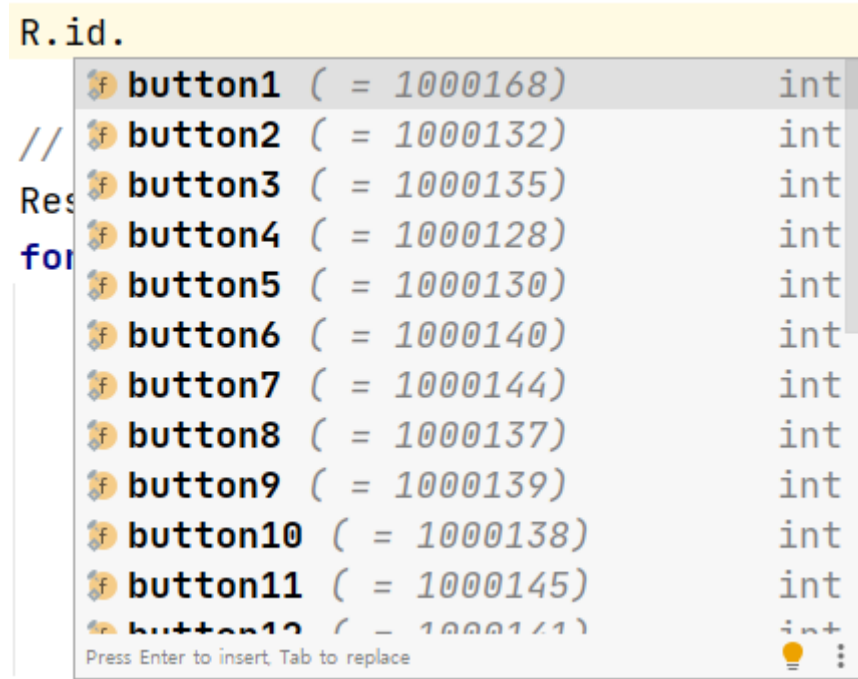
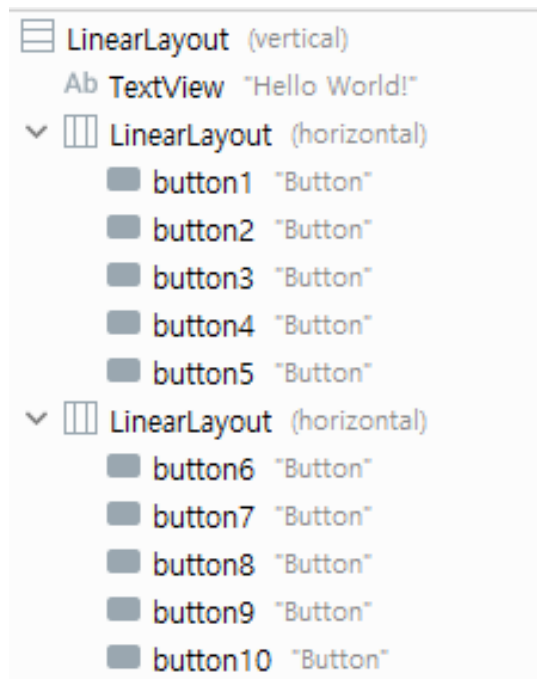
- 임의 숫자 생성
 - java.lang.Math 클래스
 - java.util.Random 클래스

```
private int getRandomRange(int start, int end) {  
    return (int)(Math.random() * 20 + 10);  
}
```

Day19(0608)

- Java Reflection

- 문자열 버튼 이름 -> R.id.button_id 아이디 전환



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- Java Reflection

- 문자열 버튼 이름 -> R.id.button_id 아이디 전환

R.id.

```
button1 ( = 1000168) int
// button2 ( = 1000132) int
Res button3 ( = 1000135) int
for button4 ( = 1000128) int
button5 ( = 1000130) int
button6 ( = 1000140) int
button7 ( = 1000144) int
button8 ( = 1000137) int
button9 ( = 1000139) int
button10 ( = 1000138) int
button11 ( = 1000145) int
button12 ( = 1000141) int
Press Enter to insert, Tab to replace
```

// 게임 버튼 리스너 초기화

```
Resources res = getResources(); // res
```

```
for(int i = 1; i <= 20; i++) {
```

```
    // Reflection api
```

```
    int id = res.getIdentifier(
```

```
        name: "button" + i,
```

// 이름

```
        defType: "id",
```

// 종류

```
        getClass().getPackage().getName()); // 패키지 이름
```

```
    buttons[i-1] = findViewById(id); // R.id.button1
```

```
    buttons[i-1].setOnClickListener(btnListener);
```

```
}
```


Day19(0608)

- View의 가시성(Visibility)

View.***VISIBLE***



View.***INVISIBLE***



View.***GONE***



Day19(0608)

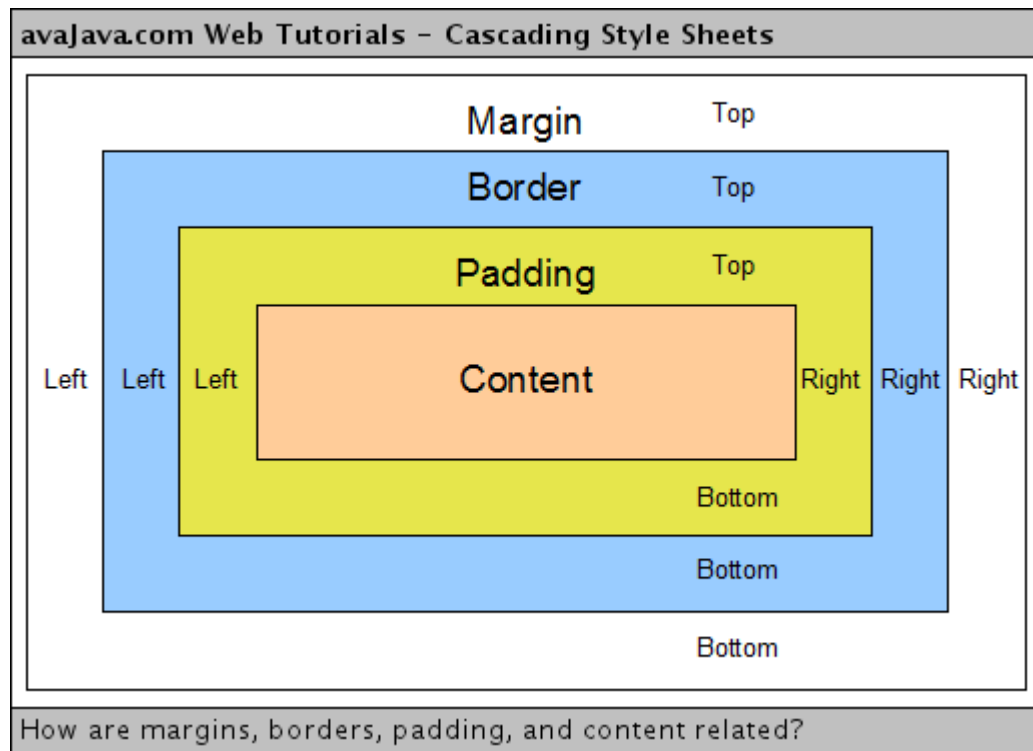
- View의 Enable/Disable



```
Button btn_start = findViewById(R.id.button_start);  
btn_start.setEnabled(true);  
btn_start.setClickable(true);
```

Day19(0608)

- Margin : 다른 객체 사이의 여백
- Padding : 객체 내부의 컨텐츠까지 여백
- Border : 객체의 외각선 (두께, 형태...)



Day19(0608)

- 공통 인텐스 / 색상

- Common intents

- <https://developer.android.com/guide/components/intents-common>

- 색상코드

- 색상코드: 색상표시 hex
 - <https://namu.wiki/w/헥스%20코드>

```
Color.  
Color.alpha(int color) android.graphics int  
Color.alpha(long color) android.graphics float  
Color.argb(int alpha, int red, int green, int blue) android.graphics int  
Color.argb(float alpha, float red, float green, float blue) android.graphic... int  
Color.BLACK ( = -16777216) android.graphics int  
Color.BLUE ( = -16776961) android.graphics int  
Color.blue(int color) android.graphics int  
Color.blue(long color) android.graphics float  
Color.colorSpace(long color) android.graphics ColorSpace  
Color.colorToHSV(int color, float[] hsv) android.graphics void  
Color.convert(long color, Connector connector) android.graphics long  
Color.convert(int color, ColorSpace colorSpace) android.graphics long
```

Press Enter to insert, Tab to replace