

1. What is the purpose of setContentView(R.layout.activity_main);?

Its main purpose was to show the content on the screen. It serves as a bridge connecting the xml and the java code. Without setContentView() nothing will display on the screen.

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);
// Connect XML views to Java
```

2. Explain what findViewById() does.

It navigates the components defined in the xml file from the java code. It gives the access to manipulate the elements inside the xml.

```
etName = findViewById(R.id.etName);
btnGreet = findViewById(R.id.btnGreet);
tvGreeting = findViewById(R.id.tvGreeting);
// Connect XML views to Java
```

3. Why do we use setOnClickListener() on the button?

It serves as a trigger for a certain command to run. In this case the command is to display the input of the user along the greeting text. When the user press the button it will trigger the command.

```
// Set CLICK listener for button
btnGreet.setOnClickListener(new View.OnClickListener() {
    @Override
```

4. Modify the app so that if no name is entered, a Toast message is displayed instead of changing the TextView. (Optional challenge)

```
public void onClick(View v) {
    String name = etName.getText().toString().trim();
    if (name.isEmpty()) {
        Toast.makeText(context: MainActivity.this, text: "Please input your name", LENGTH_SHORT).show();
    } else {
        String message = "Hello, " + name + "! Welcome to Android Development.";
        tvGreeting.setText(message);
    }
}
```