

## Code-Based Questions for MAD lab

1. How do you declare a TextView in an XML layout file?

```
<TextView
    android:id="@+id/textView"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Hello, World!" />
```

2. How do you find a view by its ID in an Activity?

java code

```
TextView textView = findViewById(R.id.textView);
```

3. How do you set an OnClickListener for a Button in Java?

java code

```
Button button = findViewById(R.id.button);
button.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        // Code to execute when button is clicked
    }
});
```

4. How do you start a new Activity using an Intent?

java code

```
Intent intent = new Intent(CurrentActivity.this, NewActivity.class);
startActivity(intent);
```

5. How do you pass data from one Activity to another using an Intent?

java code

```
Intent intent = new Intent(CurrentActivity.this, NewActivity.class);
intent.putExtra("key", "value");
startActivity(intent);
```

6. How do you retrieve data from an Intent in the receiving Activity?

java code

```
Intent intent = getIntent();
String value = intent.getStringExtra("key");
```

7. How do you create a simple AlertDialog in Android?

java code

```
new AlertDialog.Builder(this)
```

```

.setTitle("Alert")
.setMessage("This is an alert message")
.setPositiveButton(android.R.string.yes, new DialogInterface.OnClickListener() {
    public void onClick(DialogInterface dialog, int which) {
        // Continue with action
    }
})
.setNegativeButton(android.R.string.no, null)
.setIcon(android.R.drawable.ic_dialog_alert)
.show();

```

8.How do you read a string resource in Java?

java code

```
String myString = getResources().getString(R.string.my_string);
```

9.How do you define a string resource in XML?

Answer:

xml

```

<resources>
    <string name="my_string">Hello, World!</string>

```

10.How do you handle runtime permissions in Android (e.g., for accessing the camera)?

Answer:

java code

```

if (ContextCompat.checkSelfPermission(this, Manifest.permission.CAMERA)
    != PackageManager.PERMISSION_GRANTED) {
    ActivityCompat.requestPermissions(this,
        new String[]{Manifest.permission.CAMERA}, MY_PERMISSIONS_REQUEST_CAMERA);
}

```

11.How do you display an image from the drawable resources in an ImageView?

java code

```

ImageView imageView = findViewById(R.id.imageView);
imageView.setImageResource(R.drawable.my_image);

```

12.How do you create a custom Toast message in Android?

java code

```

Toast toast = Toast.makeText(getApplicationContext(), "Custom Toast", Toast.LENGTH_SHORT);
toast.setGravity(Gravity.CENTER, 0, 0);
toast.show();

```

13.How do you handle click events for items in a ListView?

java code

```
ListView listView = findViewById(R.id.listView);
listView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
    @Override
    public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
        // Code to handle item click
    }
});
```