Student Enrollment No: _______________

GANPAT UNIVERSITY

B. TECH (COMPUTER ENGINEERING/INFORMATION TECHNOLOGY)

SEM-V REGULAR EXAMINATION– NOV-DEC 2020

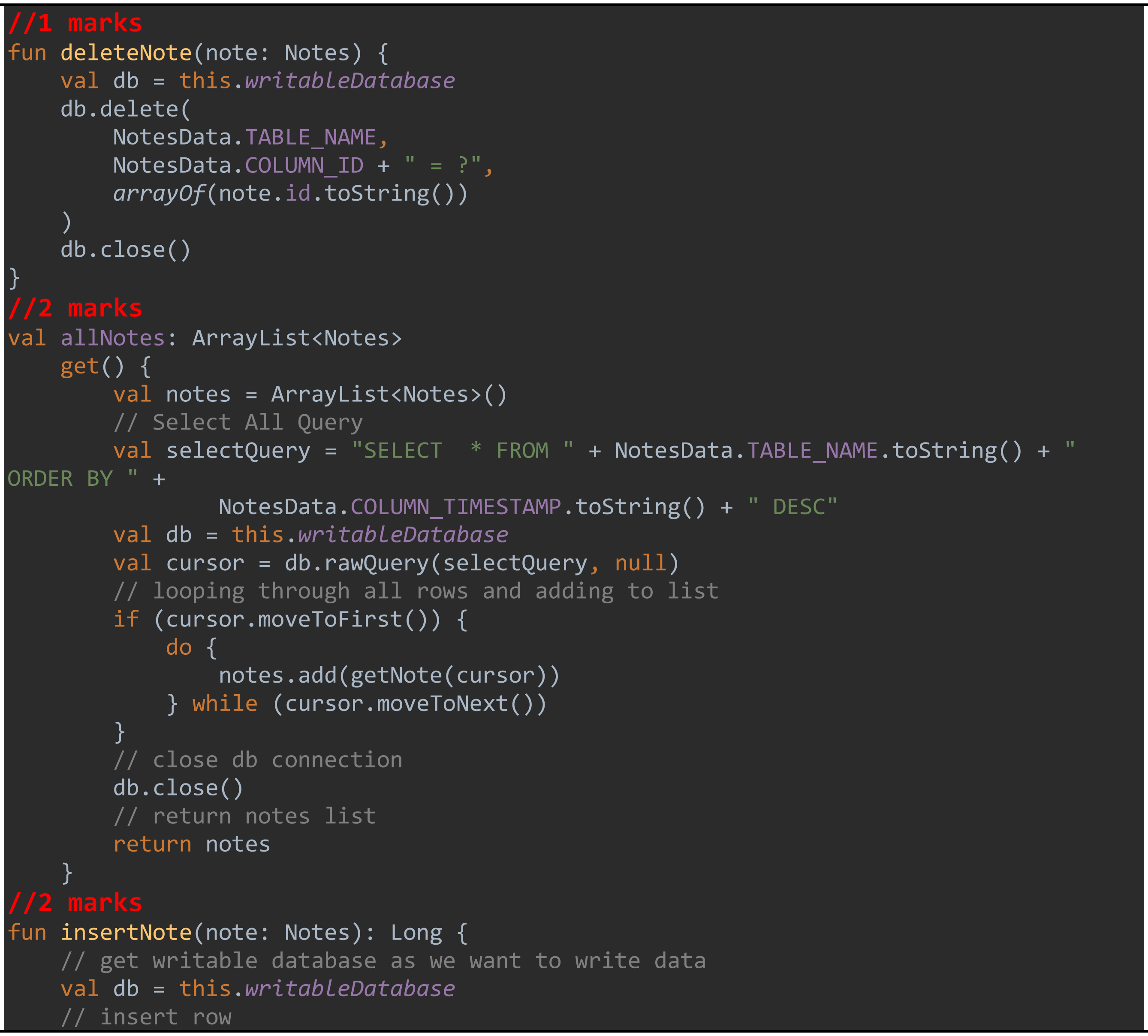
2CEIT5PE5: MOBILE APPLICATION DEVELOPMENT

Time: 1.5 Hour] **[Total Marks: 30**

Instructions:

1. Figures to the right indicate full marks.
2. Be precise and to the point in your answer.
3. Assume the suitable data wherever necessary.

Q-1



```
//1 marks
fun deleteNote(note: Notes) {
    val db = this.writableDatabase
    db.delete(
        NotesData.TABLE_NAME,
        NotesData.COLUMN_ID + " = ?",
        arrayOf(note.id.toString())
    )
    db.close()
}
//2 marks
val allNotes: ArrayList<Notes>
    get() {
        val notes = ArrayList<Notes>()
        // Select All Query
        val selectQuery = "SELECT  * FROM " + NotesData.TABLE_NAME.toString() + "
ORDER BY " +
                NotesData.COLUMN_TIMESTAMP.toString() + " DESC"
        val db = this.writableDatabase
        val cursor = db.rawQuery(selectQuery, null)
        // looping through all rows and adding to list
        if (cursor.moveToFirst()) {
            do {
                notes.add(getNote(cursor))
            } while (cursor.moveToNext())
        }
        // close db connection
        db.close()
        // return notes list
        return notes
    }
//2 marks
fun insertNote(note: Notes): Long {
    // get writable database as we want to write data
    val db = this.writableDatabase
    // insert row
```

5

```
    val id = db.insert(NotesData.TABLE_NAME, null, getValues(note))
    // close db connection
    db.close()
    // return newly inserted row id
    return id
}
```

Q-2

```
class PrefUtil {
    companion object{
        fun getPrefValue(context: Context, key: String):String?{
            val pref = PreferenceManager.getDefaultSharedPreferences(context)
            return pref.getString(key, "")
        }
        fun setPrefValue(context: Context, key: String, value: String)
        {
            val pref = PreferenceManager.getDefaultSharedPreferences(context)
            val prefsEditor: Editor = pref.edit()
            prefsEditor.putString(key, value)
            prefsEditor.apply()
        }
    }
}
```

5

Q-3

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical">
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">
    <TextView
        android:text="Name"
        android:layout_margin="5dp"
        android:textSize="22sp"
        android:textStyle="bold"
        android:id="@+id/txtName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"/>
        <TextView
            android:text="Phone"
            android:gravity="end"
            android:layout_margin="5dp"
            android:textSize="20sp"
            android:id="@+id/txtPhone"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"/>

    </LinearLayout>
    <TextView
        android:text="Email"
```

5

```
        android:layout_margin="5dp"
        android:gravity="end"
        android:textSize="20sp"
        android:id="@+id/txtEmail"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"/>
    <TextView
        android:text="Address"
        android:layout_margin="5dp"
        android:id="@+id/txtAddress"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"/>
</LinearLayout>
```

```
override fun getView(position: Int, convertView: View, parent: ViewGroup): View {
    val view = LayoutInflater.from(mContext).inflate(R.layout.contact_item, null)
    val currentContact = getItem(position)
    val viewHolder = ViewHolder()
    viewHolder.txtName = view.findViewById(R.id.txtName)
    viewHolder.txtEmail = view.findViewById(R.id.txtEmail)
    viewHolder.txtPhone = view.findViewById(R.id.txtPhone)
    viewHolder.txtAddress = view.findViewById(R.id.txtAddress)
    if (currentContact != null) {
        viewHolder.txtName.setText(currentContact.Name)
        viewHolder.txtEmail.setText(currentContact.EmailId)
        viewHolder.txtPhone.setText(currentContact.PhoneNo)
        viewHolder.txtAddress.setText(currentContact.Address)
    }
    return view
}
```

Q-4

```
//2 marks
class SMSBroadcastReceiver : BroadcastReceiver() {
    override fun onReceive(context: Context, intent: Intent) {
        if (intent.action == Telephony.Sms.Intents.SMS_RECEIVED_ACTION) {
            var sPhoneNo = ""
            var sSMSBody = ""
            if (Build.VERSION.SDK_INT >= Build.VERSION_CODES.M) {
                for (smsMessage in
Telephony.Sms.Intents.getMessagesFromIntent(intent)) {
                    sPhoneNo = smsMessage.displayOriginatingAddress
                    sSMSBody += smsMessage.messageBody
                }
            }
        }
    }
}

//2 marks
```

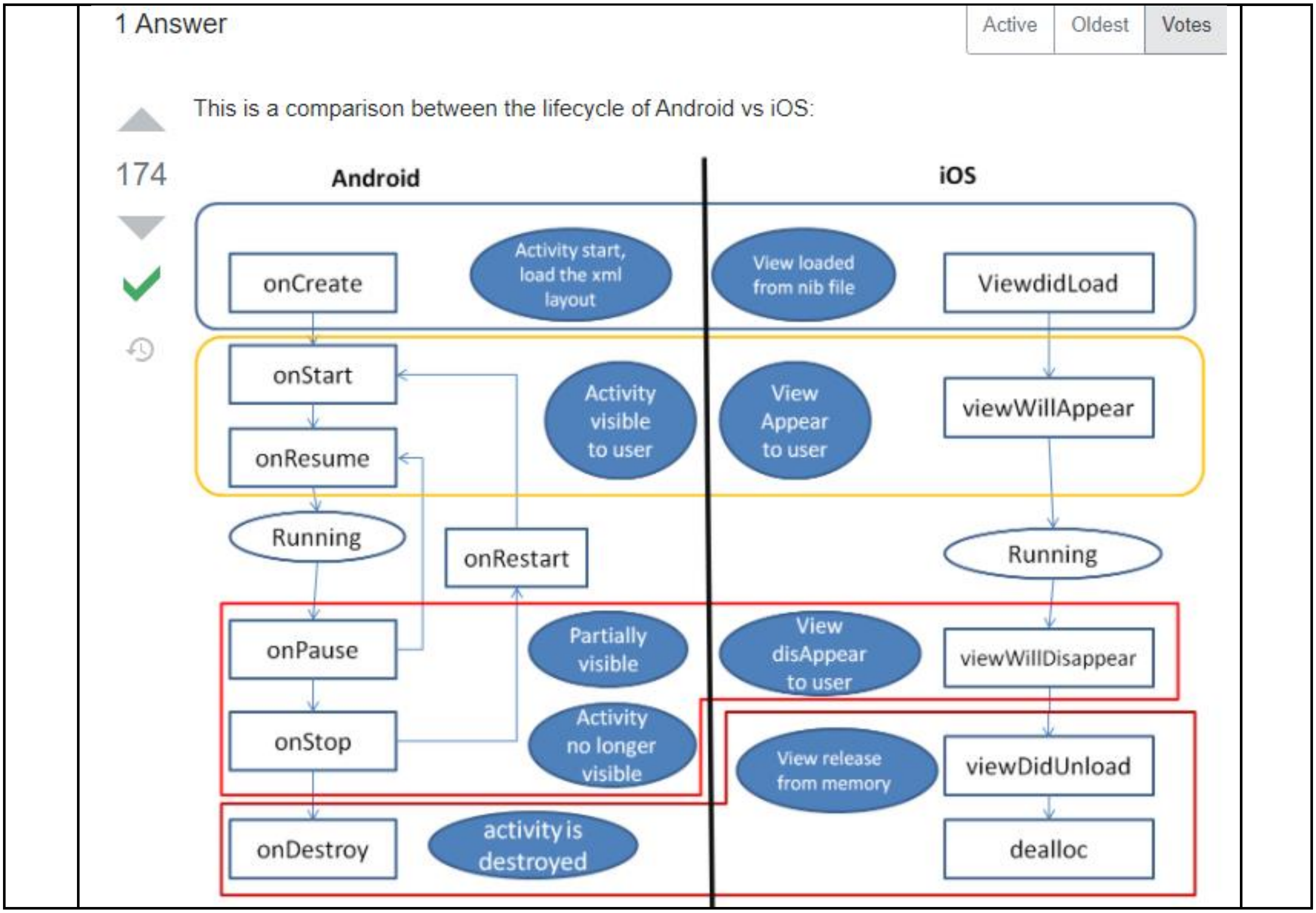
5

```
val PhoneNo = editPhoneNo.getText().toString()
val sMessage = editMessage.getText().toString()
val smsManger = SmsManager.getDefault()
smsManger.sendTextMessage(PhoneNo, null, sMessage, null, null)

//1 marks
<uses-permission android:name="android.permission.RECEIVE_SMS"/>
<uses-permission android:name="android.permission.READ_SMS"/>
<uses-permission android:name="android.permission.SEND_SMS"/>
```

Q-5 5

```
fun ParseJsonData(sJson: String?) : ArrayList< Employee >(){
    val employeeList = ArrayList< Employee >()
    try {
        val jsonArray = JSONArray(sJson)
        for (i in 0 until jsonArray.length()) {
            val jsonObject = jsonArray[i] as JSONObject
            val employee = Employee (jsonObject)
            employeeList.add(employee)
        }
        return employeeList
    } catch (ee: JSONException) {
        ee.printStackTrace()
    }
}
class Employee(jsonObject: JSONObject) {
    var Name: String
    var EmailId: String
    var PhoneNo: String
    var Address: String

    /*
    * [
    * {"_id":"5f8d677c68d8ae7ceab6a732",
    * "name":{"first":"Lloyd","last":"York"},
    * "email":"lloyd.york@undefined.net",
    * "phone":"+1 (817) 545-3660",
    * "address":"311 Livonia Avenue, Belva, Ohio, 6019"}*/
    init {
        val nameJson = jsonObject.getJSONObject("name")
        Name = nameJson.getString("first") + " " + nameJson.getString("last")
        EmailId = jsonObject.getString("email")
        PhoneNo = jsonObject.getString("phone")
        Address = jsonObject.getString("address")
    }
}
```

Q-6 5



1 Answer

This is a comparison between the lifecycle of Android vs iOS:

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