

Q2(a). Write a code to insert product information (pid, pname, pcategory, pprice) in SQLite database

```
public class DBHelper extends SQLiteOpenHelper {
    public DBHelper(Context context) { super(context, "product.db", null, 1); }

    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("CREATE TABLE product(pid INTEGER PRIMARY KEY
        AUTOINCREMENT, pname TEXT, pcategory TEXT, pprice REAL)");
    }
    public long insertProduct(String name, String category, double price) {
        SQLiteDatabase db = this.getWritableDatabase();
        ContentValues values = new ContentValues();
        values.put("pname", name);
        values.put("pcategory", category);
        values.put("pprice", price);
        return db.insert("product", null, values);
    }
    public Cursor getAllProducts() {
        SQLiteDatabase db = this.getReadableDatabase();
        return db.rawQuery("SELECT * FROM product", null);
    }
}

DBHelper dbHelper = new DBHelper(this);
btnInsert.setOnClickListener(v -> {
    String name = etName.getText().toString();
    String category = etCategory.getText().toString();
    double price = Double.parseDouble(etPrice.getText().toString());
    dbHelper.insertProduct(name, category, price);
    loadProducts();
});

private void loadProducts() {
    Cursor cursor = dbHelper.getAllProducts();
    while (cursor.moveToNext()) {
        int pid = cursor.getInt(0);
        String pname = cursor.getString(1);
        String category = cursor.getString(2);
        double price = cursor.getDouble(3);
        // Add to ListView / Adapter
    }
}
```

Q3(a) Write a code to get current location & display it in text view.

```

FusedLocationProviderClient fusedLocationClient =
LocationServices.getFusedLocationProviderClient(this);

TextView tvLocation = findViewById(R.id.tvLocation);

if (ActivityCompat.checkSelfPermission(this,
Manifest.permission.ACCESS_FINE_LOCATION) !=
PackageManager.PERMISSION_GRANTED) {
    ActivityCompat.requestPermissions(this, new
String[]{Manifest.permission.ACCESS_FINE_LOCATION}, 100);
}

fusedLocationClient.getLastLocation()
    .addOnSuccessListener(location -> {
        if (location != null) {
            tvLocation.setText("Lat: " + location.getLatitude() + ", Lng: " +
location.getLongitude());
        }
    });

```

Q5 Do as Directed

1. Which of the following is NOT a feature of Object-Oriented Programming?

Answer: D) Preprocessing

2. In the Waterfall Model of SDLC, testing is performed:

Answer :A) After coding is complete

3. Which of the following represents data storage in a Data Flow Diagram (DFD)?

Answer: C) Parallel lines

4. Which layer of the Android Architecture provides libraries like SQLite, WebKit, and SSL?

Answer: B) Libraries Layer

5. Which method is called when an Activity becomes visible but not yet interactive?

Answer: B) onStart()

6. In Android, which class is used to implement a tabbed UI with swipe navigation?

Answer: B) ViewPager

7. Which method is used to store key-value pairs in SharedPreferences?

Answer: C) putString()

8. Which Android library is widely used for network calls and parsing JSON in modern apps?

Answer: B) Retrofit

9. Which permission must be declared in AndroidManifest.xml to access device location?

Answer: B) android.permission.ACCESS_FINE_LOCATION

10. Which Android class is primarily used to get the device's last known location?

Answer: B) LocationManager