1.activitymain.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:id="@+id/main">

    <androidx.recyclerview.widget.RecyclerView
        android:id="@+id/recyclerView"
        android:layout_width="match_parent"
        android:layout_height="match_parent"/>

    <com.google.android.material.floatingactionbutton.FloatingActionButton
        android:id="@+id/fab"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentEnd="true"
        android:layout_alignParentBottom="true"
        android:layout_margin="16dp"
        android:src="@drawable/img" />
</RelativeLayout>
```

2.создание нового класса

```kotlin
data class Item(    val text: String)
```

3.Создание item_rec.xml для того как будет олтображаться элементы списка

```xml
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/
    xmlns:app="http://schemas.android.com/apk/res-auto
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

    <TextView
        android:id="@+id/txt1"
        android:layout_width="0dp"
        android:layout_height="64dp"
        android:layout_marginTop="16dp"
        android:text="тест"
        android:textSize="36sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

4.класс адаптера

```kotlin
import ...

class ItemAdapter(private val item: List<Item>) :
    RecyclerView.Adapter<ItemAdapter.ItemViewHolder>() {

    class ItemViewHolder(view: View) : RecyclerView.ViewHolder(view) {
        val textView: TextView = view.findViewById(R.id.txt1)
    }

    override fun onCreateViewHolder(parent: ViewGroup, viewType: Int): ItemViewHolder {
        val view = LayoutInflater.from(parent.context).inflate(R.layout.item_rec, parent, attachToRoot: false)
        return ItemViewHolder(view)
    }

    override fun onBindViewHolder(holder: ItemViewHolder, position: Int) {
        holder.textView.text = item[position].text
    }

    override fun getItemCount(): Int {
        return item.size
    }
}
```

5.MainActivity.kt

```kotlin
class MainActivity : AppCompatActivity() {
    private lateinit var recyclerView: RecyclerView
    private lateinit var fab: FloatingActionButton
    private val items: MutableList<Item> = mutableListOf()
    private lateinit var adapter: ItemAdapter

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        recyclerView = findViewById(R.id.recyclerView)
        fab = findViewById(R.id.fab)

        adapter = ItemAdapter(items)
        recyclerView.layoutManager = LinearLayoutManager( context: this)
        recyclerView.adapter = adapter

        fab.setOnClickListener {
            showInputDialog()
        }
    }

    private fun showInputDialog() {
        val builder = AlertDialog.Builder( context: this)
        builder.setTitle("Добавить элемент")
        val input = EditText( context: this)
        builder.setView(input)

        builder.setPositiveButton( text: "Добавить") { dialog, _ ->
            val text = input.text.toString()
            if (text.isNotEmpty()) {
                items.add(Item(text))
                adapter.notifyItemInserted( position: items.size - 1)
            }
            dialog.dismiss()
        }

        builder.setNegativeButton( text: "Отмена") { dialog, _ -> dialog.cancel() }
        builder.show()
    }
}
```

6.Работа приложения

Добавить элемент

Отмена   Добавить

Добавить элемент

2131231

Отмена   Добавить

1232131231

1231

31231