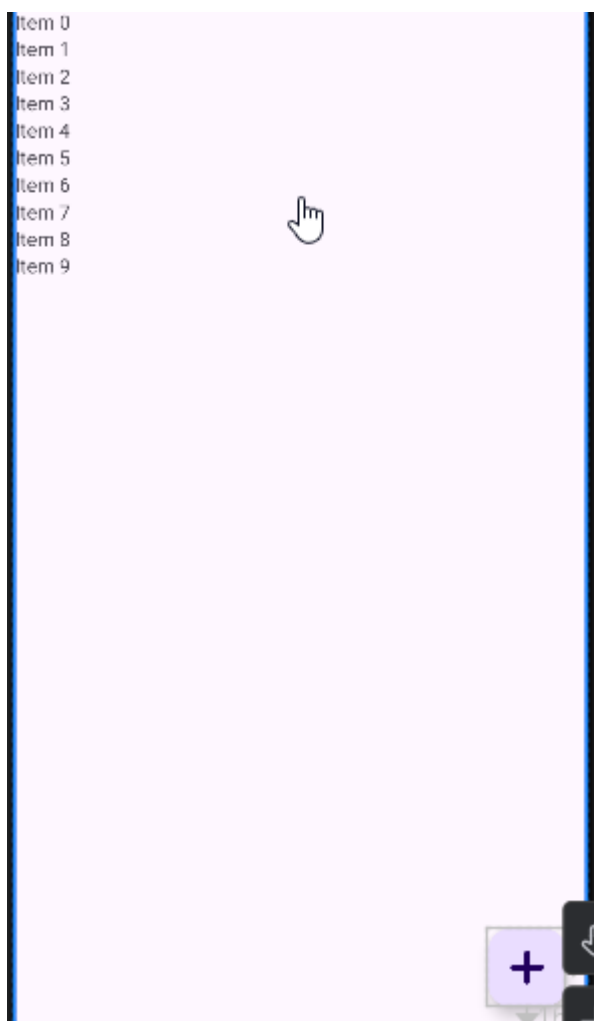


Выполнил: Войтенко Данил

Вот xml main

```
<?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/_2339" />
</RelativeLayout>
```



Далее файл mainactivity

```

package com.example.practice14

import android.app.AlertDialog
import android.os.Bundle
import android.widget.EditText
import androidx.activity.enableEdgeToEdge
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
import androidx.recyclerview.widget.LinearLayoutManager
import androidx.recyclerview.widget.RecyclerView
import com.google.android.material.floatingactionbutton.FloatingActionButton

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)
        enableEdgeToEdge()
        setContentView(R.layout.activity_main)
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
            val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
            insets
        }
    }
}

```

```

    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()
    }
}

```

## Адаптер

```
package com.example.practice14

import android.view.LayoutInflater
import android.view.View
import android.view.ViewGroup
import android.widget.TextView
import androidx.recyclerview.widget.RecyclerView

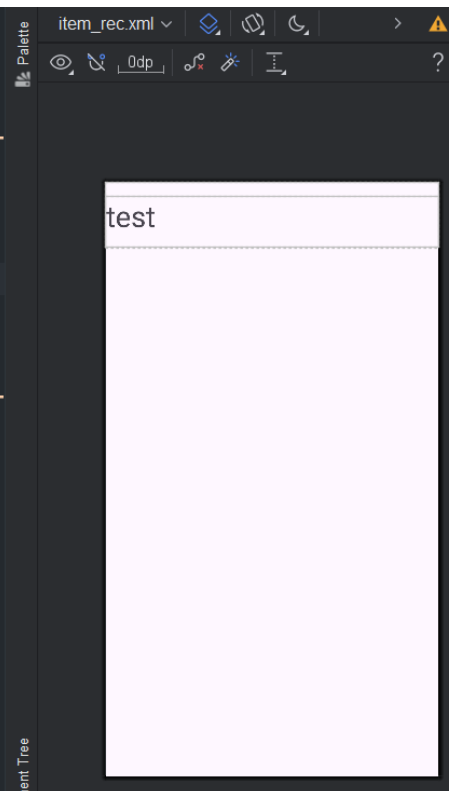
class ItemAdapter(private val item: List<Item>) :
    RecyclerView.Adapter<ItemAdapter.ItemViewHolder>(){
    class ItemViewHolder(view: View) : RecyclerView.ViewHolder(view) {
        val textView : TextView = view.findViewById(R.id.txt1)
    }

    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
    }
}
```

```
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    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="test"
        android:textSize="36sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```



Дата класс для фильтрации и преобразования в другой тип

```
package com.example.practice14  
  
data class Item(val text : String)
```

Пример работы

